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ABSTRACT

This report presents the data collected as part of the 1990 New Entrants Survey on the demographic, education, and employment characteristics of recent college graduates in science and engineering fields. A major objective of the survey was to develop national estimates and characteristics of the total population of scientists and engineers in the United States. The report is presented in three sections. The first section discusses the survey design, response rates of the sample (25,686) of science and engineering graduates in 1988 and 1989, definitions of key variables in the survey, differences of the survey results with other data sources, and sampling errors. The second section, which makes up the majority of the report, presents detailed statistical tables reporting graduate characteristics by field of degree, sex, graduate school status, employment status, racial/ethnic group, type of employer, primary work activity, and annual salaries. The tables are grouped into the following science and engineering categories: (1) 1988 bachelor's-degree recipients; (2) 1988 master's-degree recipients; (3) 1989 bachelor's-degree recipients; (4) 1989 master's-degree recipients; (5) median annual salaries of 1988 and 1989 bachelor's-degree recipients; (6) median annual salaries of 1988 and 1989 master's-degree recipients; and (7) selected employment characteristics of 1988 and 1989 bachelor's- and master's-degree recipients. The third section reproduces a copy of the questionnaire used in the survey.

Characteristics of Recent Science and Engineering Graduates: 1990

Surveys of Science Resources Series
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Detailed Statistical Tables

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National Science Foundation staff express their appreciation for the assistance of the recent science and engineering graduates and their institutions who responded to this survey; their cooperation made the report possible. For additional information on the 1990 survey, contact the Personnel Program, Division of Science Resources Studies, National Science Foundation, 1800 G Street, N.W., Rm. L-609, Washington, D.C. 20550, (202) 634-4664.

Contents

General Notes

In these tables, data are presented on the characteristics of men and women who received a bachelor's or master's degree in a science or engineering field from U.S. institutions during the 1987/88 (1988) and 1988/89 (1989) academic years. The data were collected in 1990 and reflect the characteristics of individuals as of the spring of that year. In addition to disclosing the demographic attributes of recent science and engineering (S&E) graduates, the data reveal early career employment experiences, such as the extent to which recent graduates entered the labor force, whether they were able to find employment, and the attributes of that employment.

Results of this survey are presented separately for bachelor's and master's degree recipients, and most results are presented separately also for the two graduating years. To overcome some of the limitations of small cell size information the data on certain salary and selected employment characteristics are combined for the graduating classes at each degree level.

This report comprises three sections: The technical notes in Section A contain information on survey methodology, coverage, concepts, definitions, and sampling errors; detailed tabulations from the survey are presented in Section B; and the questionnaire used in the survey is reproduced in Section C.

Section A. Technical Notes

The information presented in this report was collected as part of the 1990 New Entrants Survey.[1] In this survey series, data are provided on the demographic, education, and employment characteristics of recent college graduates in science and engineering (S&E) fields. This survey, the Experienced Sample Survey, and the Survey of Doctorate Recipients constitute the National Science Foundation's (NSF) Scientific and Technical Personnel Data System (STPDS). A major objective of the STPDS is to develop national estimates and characteristics of the total population of scientists and engineers in the United States. The New Entrants data provide estimates of the recent bachelor's- and master's-degree recipients in S&E fields who have entered the labor force, and thus are a new component of the Nation's population of scientists and engineers.

Survey Design[2]

The purpose of the 1990 New Entrants Survey was to collect graduate school enrollment and labor force data on recent college graduates in S&E fields. Specifically, the survey objectives called for a national sample of recent college graduates for each of two periods--those graduated between July 1, 1987, and June 30, 1988 (1988 graduating class), and those graduated between July 1, 1988, and June 30, 1989 (1989 graduating class).

A 2-stage probability sample of graduates was employed for this study. In the first stage, 274 universities and colleges[3] were selected as the primary sampling units (PSUs).

In choosing the 94 noncertainty PSUs, stratification was imposed by geographic region, public/private status, whether or not agricultural curriculums were offered, and percent of engineering graduates. A special stratum of predominately minority universities was also assembled; six predominantly black universities and three Hispanic PSUs were selected with probabilities proportional to measures of size.

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[1] This survey was conducted under contract with NSF by the Institute for Survey Research, Temple University.

[2] Detailed aspects of the survey design as well as other technical details may be found in Methodological Approach to the 1990 New Entrants Surveys (Philadelphia, Pa.: Institute for Survey Research, Temple University, 1991).

[3] Schools were selected from the institutions included in the 1984-85 Higher Education General Information Survey (HEGIS) of the National Center for Education Statistics.

The second stage of the sample involved the selection of graduates within PSUs. The sampling frame consisted of lists of graduates supplied by the universities chosen in the first stage sample. The lists generally included data on degree received, major field of study, year of graduation, and mailing address. Within "Hispanic" PSUs, all students were oversampled by a factor of two. Similarly, all students within "black" PSUs were oversampled by a factor of two. In table A-1, sample sizes and response data for each major field/degree cell for the combined 1988 and 1989 graduating classes are presented.

Table A-1. Estimated sampling and response characteristics: 1990 New Entrants Survey

Field of degree	Estimated number of graduates[1]		Number in Sample		Estimated percentage sampled[2]		Number of responses	
	Bachelor's	Master's	Bachelor's	Master's	Bachelor's	Master's	Bachelor's	Master's
Total.....	643,262	136,619	15,055	10,631	2.3	7.8	10,078	6,728
Physical sciences.....	29,425	9,171	1,637	2,055	5.6	22.4	803	871
Mathematical sciences.....	35,267	10,623	664	1,635	1.9	6.0	550	495
Computer sciences.....	69,272	22,188	2,036	823	2.9	3.7	1,456	606
Environmental sciences.....	7,320	5,219	428	884	5.8	16.9	289	618
Biological sciences.....	79,926	12,088	460	163	.6	1.4	575	322
Agricultural sciences.....	31,254	7,196	909	212	2.9	3.0	713	235
Psychology....	85,665	7,311	630	343	.7	4.7	432	145
Social sciences.....	156,386	19,944	1,208	530	.8	2.7	852	374
Engineering...	148,746	42,880	6,531	4,451	4.4	10.4	4,408	3,062
No major given.....	[3]	[3]	552	535	[4]	[4]	[3]	[3]

1/ The figures in this column are the final weighted estimates derived from the 1990 New Entrants Survey.

2/ This number should not be interpreted as the precise sampling rate. The rows of this table have collapsed 29 sampling strata, each with its own sampling rate. (See the Methodological Report for details.) Also, the number in the sample was based on the year of graduation that had been reported for the graduate, not the year of graduation actually reported in the questionnaire. The column is given only as an approximation to an "average" sampling rate across sampling strata.

3/ The numbers here reflect the field of study as derived from the questionnaire. Thus, respondents appearing in one field may already have been sampled in another (e.g., double major). Also, the "No major" entries are not available because the data were distributed in the respondents' respective fields of study. For these reasons, response rates derived from this table will tend to overestimate the true values. (See Methodological Report for a more appropriate treatment of survey response.)

4/ Since the estimated number of graduates was based on the field of degree in the questionnaire, the denominator for the entry in this cell would be blank.

NOTE: The data in this table are provided for consistency with other segments of this report; a more detailed presentation is furnished in the report titled *Methodological Approach to the 1990 New Entrants Survey*, Institute for Survey Research, Temple University, Philadelphia, Pennsylvania, 1991.

SOURCE: Institute for Survey Research, Temple University

Graduate Response

The disposition of sampled graduates in the 1990 New Entrants Survey is presented in table A-2. A total of 25,686 (unweighted) graduates were sampled from lists furnished by the selected universities and colleges. Sampled graduates received a maximum of four mailings (an initial mailing, a postcard followup, a second mailing, and a third via certified mail). Following these four mailings, an intensive effort was made to find telephone numbers for the nonrespondents and, wherever possible, potential respondents were interviewed by phone.

Responses were provided by 73.3 percent (18,834) of the 25,686 graduates. Of these, 10.8 percent (2,028) were found to be out of scope either because they had not received a degree in an science or engineering field, had not received their degree in one of the graduating classes being surveyed, or were deceased. Of the 6,852 remaining graduates who did not respond, about 45 percent (3,104) failed to respond after four contacts were attempted through the mail and/or telephone, and 46.9 percent (3,213) did not receive a questionnaire because no usable address could be found. An additional 7.8 percent (535) refused to complete the questionnaire. In terms of all individuals for whom a usable address was obtained and who were eligible to participate (i.e., received either a bachelor's or master's degree in an S&E field in either 1988 or 1989), the survey experienced an unweighted return rate of 82.2 percent (16,806/20,445).

In some cases respondents provided information about their major field of study, degree conferred, and year of graduation that differed from the information provided by the colleges. Final designation of field/degree/year was based on these responses rather than on the initial sampling code. Changes in the sampling strata could have occurred for several reasons: (1) the individual graduated at a later date than was reported on the list; (2) the graduate had a double major; (3) the individual was in receipt of both a BA/BS and MA/MS within eligible years and fields; (4) the graduates were selected from the "unknown field" sampling stratum; or (5) there were errors in the lists, e.g., wrong major or degree. The unweighted sizes for the major fields of study are presented in table A-3 .

The basic sampling weight used for the 1990 New Entrants Survey was the inverse of the probability of selection. The basic sampling weight reflected the conferred degree and major field of study stratum in which the graduate was sampled. It also accounted for such design features as the oversampling of blacks as well as Hispanic-surnamed graduates and the multiple chances of selection because of duplication. An additional weighted adjustment involved use of data from the Integrated Postsecondary Education Data System (IPEDS) data tape to produce ratio-type estimates of totals. A detailed discussion of these weighting procedures may be found in the methodological report of the survey.[4]

Weight adjustments were utilized to compensate for both institutional (primary sampling unit) and individual nonresponse.

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[4] Methodological Approach to the 1990 New Entrants Surveys, op.cit.

Table A-2. Response status of sampled graduates: 1990 New Entrants Survey

Status	Total
Total	25,686
Response	18,834
Mail interviews	13,185
Telephone interviews	3,621
Out of scope--mail	1,567
Out of scope--telephone	448
Out of scope--deceased	13
No responses	6,852
Address presumed correct	1,602
Status of address not determined, probably incorrect	1,154
Incorrect address	1,594
New address obtained--Presumed correct	1,376
Unavailable	126
Refused	535
No address available	465

NOTE: The survey covered both 1988 and 1989 graduating classes.

SOURCE: Institute for Survey Research, Temple University

Table A-3. Unweighted cell sizes for major fields of study: 1990 New Entrants Survey

Major field of study	1988 graduates		1989 graduates	
	Bachelor's	Master's	Bachelor's	Master's
Total	5,033	3,233	5,045	3,495
Sciences, total	2,814	1,734	2,856	1,932
Physical sciences	403	401	400	470
Chemistry	240	148	239	151
Physics/astronomy	121	146	138	185
Other physical sciences	42	107	23	134
Mathematics/statistics	256	242	294	253
Computer sciences	718	286	738	320
Envirionmental sciences	163	307	126	311
Life sciences	668	271	620	286
Biology	296	161	279	161
Agricultural	372	110	341	125
Psychology	193	62	239	83
Social sciences	413	165	439	209
Economics	151	34	165	50
Sociology/anthropology	87	40	92	48
Other social sciences	175	91	182	111
Engineering, total	2,219	1,499	2,189	1,563
Aeronautical/astro	115	44	108	42
Chemical	231	201	238	198
Civil	375	107	385	131
Electrical/electronics	386	118	410	126
Industrial	260	110	237	97
Materials	103	230	109	241
Mechanical	233	129	267	126
Mining	47	91	33	79
Nuclear	108	104	89	127
Petroleum	128	112	104	108
Other	233	253	209	288

SOURCE: Institute for Survey Research, Temple University

Definitions

The following definitions are provided to facilitate the reader's use of the data in this report.

Field of science and engineering: derived from the name of the specialty most closely related to the respondent's degree field. Employment specialty was derived from the name and code number selected from the Degree and Employment Specialty List of the questionnaire. Specialties were grouped to form fields in accordance with the classification presented in table A-4.

Labor force: derived from questions 3, 5, and 6. The labor force includes individuals working full or part time as well as those not working but seeking work. In addition, individuals who were on layoff, on vacation, or otherwise temporarily absent from a job for health or personal reasons, or who looked for work during the three weeks prior to the survey date, were included within the labor force.

Employed in S&E occupation: derived from question 14, in which data were collected on the specialty most closely related to principal employment. S&E occupations include specialties in the natural sciences, social sciences, and engineering.

Type of employer: derived from question 10. The category "educational institutions" includes junior and 2-year colleges, technical institutions, medical schools, universities or 4-year colleges, and elementary or secondary school systems. Industry includes both those employed in a business or industry as well as those who are self-employed. Employees of hospitals or clinics as well as Military/Commissioned Corps personnel are included under the category "other."

Primary work activity: derived from question 12. The term "research and development" includes basic research, applied research, development and design, but excludes research and development management. "Sales/professional services" includes distribution and clinical diagnosis. The activities grouped under "production/inspection" include work related to operations and quality control. The category "reporting, statistical work, and computing activities" includes report and technical writing, statistical work, and computer applications. Consulting activities are included under the category "other."

Salaries: derived from responses to question 15, in which information was requested on basic annual salary before deductions for such items as income tax, Social Security, and retirement but not including bonuses, overtime, summer teaching, or other payments for professional work. Salaries reported are median annual salaries of full-time employed civilians rounded to the nearest $100. Academic year salaries (9-10 months) have been multiplied by eleven-ninths to adjust the data to a calendar year (11-12 months) basis.

Table A-4. Science and engineering field classification of special codes: 1990 New Entrants Survey

Field of science or engineering	Specialty code[1]
Physical sciences	
Chemistry	722
Physics/astronomy	720, 731
Other physical sciences	421, 790
Mathematics/statistics	711-714, 750, 751, 780
Computer sciences	723-729
Environmental sciences	721, 741, 742
Life sciences	
Biology	211-290, 413
Agricultural	013-090
Psychology	818
Social sciences	
Economics	813, 823
Sociology/anthropology	811, 812, 821
Other social sciences	425, 814, 817, 822, 890
Engineering, total	
Aeronautical/astronautical	511
Chemical	515
Civil	516
Electrical/electronics	517
Industrial	521
Materials	523, 530, 733
Mechanical	522
Mining	520, 524
Nuclear	526
Petroleum	527
Other	414, 512-514, 519, 525 528, 529, 531, 590

1/ The specialty code corresponds with the "Degree and Employment Specialty List" included in the questionnaire for 1990. (See Section C).

SOURCE: Institute for Survey Research, Temple University

Comparison of Survey Results with Other Data Sources

This survey has been designed to provide information on the post-college experiences of individuals who received a bachelor's or master's degree in science or engineering one or two years preceding the conduct of this survey. The total number of cases reported for different degree fields does not always agree precisely with information produced by the National Center on Educational Statistics (NCES), which is reported in their publications and in SRS publications on degrees granted.

Differences exist between the data of this report and the results reported in *Science and Engineering Degrees: 1986-89. A Source Book* because of differing decisions made on what fields to include or exclude from the universe. For example, this survey includes individuals with bachelor's or master's degrees in engineering technology, but individuals with these degrees are excluded from the sourcebook mentioned above.

Another major difference between the survey of recent graduates and the NCES-based surveys is the methodology used to obtain information on college graduates. NCES surveys rely on information provided from college or university administrative records. The information used in this survey is provided by schools to identify individuals who received a bachelor's or master's degree in a science or engineering field. The final classification of individuals, however, is based on information provided by the graduates themselves. For example, if college records indicated that a graduate's degree was in architectural engineering but a graduate reported it as a degree in architecture or environmental design (non-S&E fields), then the graduate would not be included as an engineer in this survey but would be included as an engineer in other surveys that rely on school administrative records for the classification of individuals.

Sampling Errors

The statistics in this report are subject to error, including those resulting from sampling. Variability resulting from sampling can be calculated for estimated totals using a formula that accounts for the complex nature of the sample design. Averages of the square roots of design effects were calculated separately for each combination of year of graduation/degree field/degree level and for 23 tabulation items. These averages were then employed in the production of generalized sampling errors.

The generalized sampling error of an estimated total is defined as:

$$S = D[Y(N-Y)/n]^{1/2}$$

where D is the square root of the design effect for a given graduation year/degree field/degree level combination.

N is the estimated total number of graduates in the field being analyzed.

Y is the estimated number of graduates with a given characteristic of interest, and

n is the total number of graduates in the sample for that graduation year/degree field/degree level combination.

Generalized standard errors for the reported S&E fields are presented in table A-5.

Table A-5. Generalized standard errors for recent science & engineering bachelor's degree recipients, by field: 1990

Estimate	Total Sci. & Eng.	Physical Sciences				Math/ Stat.	Comput. Sci.	Environ. Sci.	Life Sciences			Psychology	Social Sciences			
		Total	Chemistry	Physics/ Astro.	Other Phys. Sci.				Total	Biology	Agric. Sci.		Total	Economics	Soc./ Anthr.	Other Social Sci.
25	82	44	39	31	44	50	47	36	72	74	54	75	77	66	80	73
50	116	62	55	44	62	70	66	51	101	104	76	105	109	94	112	103
75	142	76	67	53	75	85	81	62	123	127	93	129	134	114	138	125
100	163	87	77	61	86	98	93	71	142	147	107	148	154	132	159	145
200	231	123	109	85	118	139	131	99	201	207	150	210	218	186	223	204
300	283	150	132	103	140	169	160	120	246	253	183	256	267	227	273	250
400	326	172	151	117	156	195	185	136	284	292	211	295	308	262	314	288
500	365	192	168	130	169	217	206	150	317	326	235	330	344	292	350	321
750	446	233	203	154	188	264	251	177	387	397	285	403	420	356	426	392
1,000	515	267	230	171	192	303	289	196	446	457	327	464	484	408	488	451
1,500	630	321	273	195	157	365	351	219	544	557	393	564	591	495	589	548
2,000	727	364	304	206		415	402	225	625	639	447	648	680	565	670	628
2,500	812	399	326	206		457	446	216	695	710	490	720	758	624	738	697
3,000	889	428	343	197		493	485	190	758	773	527	784	828	676	796	758
4,000	1,025	473	359	137		551	551		868	881	585	894	949	762	890	862
5,000	1,144	505	355			595	606		961	971	627	987	1,054	830	960	949
6,000	1,251	525	331			627	653		1,043	1,050	656	1,067	1,147	885	1,013	1,024
7,000	1,349	535	282			650	693		1,116	1,118	673	1,138	1,231	930	1,050	1,087
8,000	1,440	535	188			664	727		1,181	1,178	679	1,200	1,307	964	1,073	1,143
9,000	1,525	526				671	757		1,240	1,231	675	1,255	1,376	991	1,084	1,191
10,000	1,605	507				670	782		1,294	1,278	660	1,304	1,440	1,009	1,082	1,233
15,000	1,949	89				534	856		1,500	1,438	359	1,475	1,699	995	866	1,362
20,000	2,233						854		1,629	1,500		1,550	1,885	776		1,380
25,000	2,475						777		1,699	1,475		1,544	2,017			1,294
30,000	2,689						596		1,716	1,360		1,454	2,106			1,077
40,000	3,051								1,594	660		911	2,174			
50,000	3,351								1,203				2,103			
60,000	3,603												1,876			
70,000	3,817												1,423			
80,000	3,999															
90,000	4,153															
100,000	4,283															
150,000	4,621															
200,000	4,500															
230,000	4,197															
250,000	3,878															
300,000	2,392															
350,000																

See SOURCE at end of table.

Table A-5. Generalized standard errors for recent science & engineering bachelor's degree recipients, by field: 1990

	Engineering											
Estimate	Total	Aero./ astro.	Chem- ical	C.	Elec./ elect.	Indus- trial	Mate- rials	Mechan- ical	Mining	Nuclear	Petro- leum	Other
25	50	29	24	30	52	32	14	42	22	16	23	40
50	70	41	34	42	73	45	20	59	30	22	31	56
75	86	50	41	52	89	55	24	72	36	26	37	68
100	99	58	47	60	102	63	27	83	40	29	42	79
200	140	80	66	83	144	88	36	117	51	35	54	111
300	171	96	79	101	176	107	41	142	56	34	60	135
400	197	109	90	116	203	122	43	164	54	25	60	154
500	220	120	100	129	227	135	43	182	47		55	171
750	269	141	118	155	276	162	33	221				207
1,000	310	154	130	176	318	183		253				234
1,500	379	168	146	207	385	214		305				277
2,000	436	166	151	229	441	234		346				308
2,500	486	149	147	244	488	247		379				330
3,000	530	108	132	254	529	253		408				346
4,000	608		28	259	599	248		452				360
5,000	675			246	656	216		484				353
6,000	734			211	703	141		505				324
7,000	787			138	742			517				265
8,000	835				774			520				143
9,000	879				801			516				
10,000	919				822			502				
15,000	1,082				858			235				
20,000	1,196				783							
25,000	1,275				554							
30,000	1,326											
40,000	1,351											
50,000	1,279											
60,000	1,089											
70,000	692											
80,000												
90,000												
100,000												
150,000												
200,000												
230,000												
250,000												
300,000												
350,000												

SOURCE: Institute for Survey Research, Temple University

Table A-6. Generalized standard errors for recent science & engineering master's degree recipients, by field: 1990

Estimate	Total Sci. & Eng.	Physical Sciences				Math/ Stat.	Comput. Sci.	Environ. Sci.	Life Sciences			Psychology	Social Sciences			
		Total	Chemistry	Physics/ Astro.	Other Phys. Sci.				Total	Biology	Agric. Sci.		Total	Economics	Soc./ Anthr.	Other Social Sci.
25	45	22	21	22	23	29	33	22	46	53	32	45	50	47	39	52
50	63	31	30	31	32	41	46	31	65	75	45	64	70	66	55	73
75	77	38	36	38	39	50	56	37	79	91	55	78	86	80	66	89
100	89	43	41	44	44	58	64	43	91	105	63	90	99	92	76	103
200	126	60	56	60	58	81	91	59	128	148	88	125	139	127	104	144
300	154	73	67	71	66	98	110	71	156	179	106	151	170	152	124	174
400	178	83	74	80	70	112	127	80	179	205	121	172	195	172	139	200
500	199	92	80	86	71	124	141	88	199	227	133	190	217	188	151	221
750	243	109	88	97	57	148	171	101	240	272	156	225	262	217	169	265
1,000	280	121	90	100		166	194	109	273	306	172	250	299	235	175	298
1,500	341	138	70	89		192	232	112	325	356	189	282	357	243	155	347
2,000	393	146		32		207	261	99	363	388	191	295	401	218	49	379
2,500	437	146				214	284	60	393	406	177	291	436	142		398
3,000	477	140				214	302		415	413	144	270	463			405
4,000	547	100				191	327		441	392		146	500			387
5,000	607					123	340		448	317			518			319
6,000	659						341		435	102			517			137
7,000	707						332		401				500			
8,000	749						311		339				462			
9,000	788						275		228				399			
10,000	824						218						296			
15,000	967															
20,000	1,065															
25,000	1,130															
30,000	1,168															
40,000	1,170															
50,000	1,072															
60,000	839															
70,000	186															
80,000																
90,000																
100,000																
150,000																
200,000																
230,000																
250,000																
300,000																
350,000																

See SOURCE at end of table.

Table A-6. Generalized standard errors for recent science & engineering master's degree recipients, by field: 1990

	Engineering											
Estimate	Total	Aero./ astro.	Chem- ical	Civil	Elec./ elect.	Indus- trial	Mate- rials	Mechan- ical	Mining	Nuclear	Petro- leum	Other
25	35	28	15	23	48	24	16	34	11	15	9	23
50	49	38	21	32	67	33	22	47	14	21	11	32
75	60	46	26	39	82	40	26	58	16	24	12	39
100	69	53	29	44	95	45	29	66	17	26	13	45
200	98	70	39	61	133	62	39	92	14	26	7	62
300	119	80	45	73	161	72	43	111				75
400	137	86	48	83	185	79	45	127				85
500	153	88	50	90	205	84	45	140				93
750	186	78	47	103	246	87	31	165				110
1,000	213	29	31	111	279	79		184				121
1,500	258			112	327			207				133
2,000	294			95	361			215				135
2,500	325			40	383			211				126
3,000	351				397			194				103
4,000	395				400			88				
5,000	429				370							
6,000	456				299							
7,000	477				129							
8,000	492											
9,000	503											
10,000	510											
15,000	477											
20,000	294											
25,000												
30,000												
40,000												
50,000												
60,000												
70,000												
80,000												
90,000												
100,000												
150,000												
200,000												
230,000												
250,000												
300,000												
350,000												

SOURCE: Institute for Survey Research, Temple University

Section B. Detailed Statistical Tables

1989 Science and engineering bachelor's-degree recipients,

1989 Science and engineering master's-degree recipients,

Table B-1. 1988 science and engineering bachelor's-degree recipients, by field of degree, sex, and graduate school status: 1990

Field of degree and sex	Total	Graduate school status				
		Full-time student	Part-time student	Nonstudent	Other	No report
Total, all fields	319,800	65,200	38,900	212,500	2,800	400
Men	195,000	39,100	21,100	133,200	1,200	300
Women	124,800	26,000	17,800	79,300	1,600	100
Total sciences	246,300	58,100	28,700	157,200	2,200	100
Men	132,300	33,300	12,600	85,700	700	100
Women	114,000	24,900	16,100	71,500	1,500	100
Physical sciences	15,100	5,900	1,400	7,800	S	S
Men	11,000	4,400	1,000	5,700	S	S
Women	4,000	1,400	400	2,200	S	S
Chemistry	8,600	3,500	700	4,400	S	S
Men	5,500	2,300	400	2,800	S	S
Women	3,100	1,200	300	1,600	S	S
Physics/astronomy	4,600	2,200	400	1,900	S	S
Men	4,100	2,100	300	1,700	S	S
Women	500	100	100	300	S	S
Other phys sciences	1,900	100	300	1,400	S	S
Men	1,500	100	300	1,200	S	S
Women	400	100	S	300	S	S
Math/statistics	16,600	2,800	2,700	11,000	100	S
Men	8,600	1,700	1,100	5,800	100	S
Women	8,000	1,100	1,600	5,300	S	S
Computer science	34,500	1,700	3,800	28,700	100	100
Men	24,200	1,500	2,400	20,200	100	100
Women	10,300	200	1,400	8,500	100	S
Environ science	3,900	1,200	500	2,200	S	S
Men	2,800	800	400	1,600	S	S
Women	1,100	400	100	600	S	S
Life sciences	58,400	20,600	6,600	30,600	600	S
Men	31,100	12,700	1,900	16,100	300	S
Women	27,300	7,900	4,600	14,500	300	S
Biology	42,100	17,200	4,900	19,500	500	S
Men	21,400	10,500	1,300	9,400	200	S
Women	20,700	6,700	3,600	10,100	300	S
Agr science	16,200	3,400	1,600	11,100	100	S
Men	9,600	2,200	600	6,700	100	S
Women	6,600	1,200	1,000	4,400	S	S
Psychology	41,500	8,300	5,800	26,600	800	S
Men	13,800	3,300	2,100	8,500	S	S
Women	27,700	5,000	3,700	18,100	800	S
Social sciences	76,400	17,700	8,000	50,200	600	S
Men	40,800	8,900	3,800	27,900	200	S
Women	35,700	8,800	4,200	22,400	300	S
Economics	23,600	4,500	1,400	17,300	300	S
Men	15,100	2,700	900	11,500	S	S
Women	8,500	1,700	600	5,800	300	S
Socio/anthro	17,400	3,800	2,600	10,800	200	S
Men	5,400	1,200	1,100	3,000	200	S
Women	12,000	2,600	1,600	7,900	S	S
Other soc sciences	35,400	9,400	4,000	22,100	S	S
Men	20,200	4,900	1,900	13,400	S	S
Women	15,200	4,500	2,100	8,700	S	S

See explanatory information and SOURCE at end of table.

Table B-1. 1988 science and engineering bachelor's-degree recipients, by field of degree, sex, and graduate school status: 1990

Field of degree and sex	Total	Graduate school status				
		Full-time student	Part-time student	Nonstudent	Other	No report
Total engineering	73,400	7,000	10,200	55,300	600	200
Men	62,700	5,900	8,500	47,500	600	200
Women	10,700	1,200	1,700	7,800	S	S
Aero/astro	3,400	400	600	2,400	S	S
Men	3,000	300	500	2,200	S	S
Women	400	100	100	200	S	S
Chemical	3,600	500	500	2,600	S	S
Men	2,500	400	300	1,900	S	S
Women	1,100	100	300	700	S	S
Civil	7,600	600	800	6,100	100	S
Men	6,300	500	600	5,100	100	S
Women	1,300	100	100	1,000	S	S
Elect/electron	27,200	2,300	4,200	20,200	200	200
Men	23,900	1,800	3,900	17,900	200	200
Women	3,200	600	400	2,300	S	S
Industrial	6,500	200	1,200	5,000	100	S
Men	5,400	200	900	4,200	100	S
Women	1,100	S	300	800	S	S
Materials	900	200	100	600	S	S
Men	700	100	100	500	S	S
Women	200	S	S	100	S	S
Mechanical	14,100	1,200	1,500	11,300	100	S
Men	12,300	1,100	1,400	9,700	100	S
Women	1,900	100	200	1,600	S	S
Mining	700	100	S	500	S	S
Men	600	100	S	400	S	S
Women	100	S	S	100	S	S
Nuclear	500	100	100	300	S	S
Men	400	100	S	300	S	S
Women	100	S	S	S	S	S
Petroleum	700	200	S	500	S	S
Men	700	200	S	400	S	S
Women	S	S	S	S	S	S
Other engineering	8,300	1,200	1,100	5,900	S	100
Men	6,900	1,100	800	5,000	S	100
Women	1,400	100	300	900	S	S

KEY: S = Data suppressed for statistical reasons

NOTES: Because of rounding, components may not add to totals.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-2. 1988 science and engineering (S&E) bachelor's-degree recipients, by field of degree, employment status, and sex: 1990

Field of degree	Total population			Total employed			Employed in S&E occupation		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Total, all fields	320,000	195,000	124,800	272,500	167,200	105,000	169,800	118,100	51,600
Total sciences	246,600	132,300	114,000	204,500	109,000	95,300	108,300	65,900	42,400
Physical sciences	15,100	11,000	4,000	11,700	8,500	3,300	9,800	7,100	2,700
Chemistry	8,600	5,500	3,100	6,200	3,600	2,500	5,300	3,100	2,200
Physics/astronomy	4,600	4,100	500	3,900	3,400	500	3,600	3,200	400
Other phys sciences	1,900	1,500	400	1,700	1,400	300	900	800	100
Math/statistics	16,600	8,600	8,000	15,000	7,900	7,100	11,100	5,300	5,800
Computer science	34,500	24,200	10,300	32,600	23,000	9,600	28,300	20,000	8,300
Environ science	3,900	2,800	1,100	3,500	2,500	1,000	2,700	2,200	500
Life sciences	58,400	31,100	27,300	41,600	20,400	21,200	28,400	16,700	11,700
Biology	42,100	21,400	20,700	27,400	12,000	15,400	19,300	10,200	9,100
Agr science	16,200	9,600	6,600	14,200	8,400	5,800	9,100	6,400	2,600
Psychology	41,500	13,800	27,700	34,800	11,400	23,300	10,000	4,100	5,900
Social sciences	76,700	40,800	35,700	65,300	35,300	29,900	18,100	10,600	7,500
Economics	23,600	15,100	8,500	20,700	13,400	7,300	5,900	4,500	1,300
Socio/anthro	17,400	5,400	12,000	15,900	5,400	10,400	3,500	1,500	2,000
Other soc sciences	35,600	20,200	15,200	28,800	16,400	12,200	8,700	4,600	4,100
Total engineering	73,500	62,700	10,700	68,000	58,300	9,700	61,500	52,200	9,300
Aero/astro	3,400	3,000	400	3,200	2,800	400	2,600	2,200	400
Chemical	3,600	2,500	1,100	3,300	2,200	1,000	3,100	2,100	1,000
Civil	7,600	6,300	1,300	7,200	6,000	1,200	6,700	5,700	1,000
Elect/electron	27,200	23,900	3,200	24,900	22,200	2,700	22,900	20,100	2,800
Industrial	6,500	5,400	1,100	6,300	5,300	1,000	5,300	4,300	900
Materials	900	700	200	800	600	100	800	600	200
Mechanical	14,100	12,300	1,900	13,400	11,600	1,800	12,600	10,900	1,700
Mining	700	600	100	600	600	100	500	500	100
Nuclear	500	400	100	400	300	100	400	300	100
Petroleum	700	700	S	500	500	S	600	600	S
Other engineering	8,300	6,900	1,400	7,500	6,100	1,400	6,100	5,000	1,100

See explanatory information and SOURCE at end of table.

Table 8-2. 1988 science and engineering (S&E) bachelor's-degree recipients, by field of degree, employment status, and sex: 1990

Field of degree	Unemployed			Outside labor force		
	Total	Men	Women	Total	Men	Women
Total, all fields	9,300	5,700	3,600	38,300	22,100	16,200
Total sciences	7,300	4,000	3,300	34,800	19,300	15,400
Physical sciences	600	500	100	2,700	2,100	600
Chemistry	400	400	S	2,100	1,500	600
Physics/astronomy	100	100	S	600	500	S
Other phys sciences	100	S	100	100	100	S
Math/statistics	200	100	100	1,400	600	800
Computer science	800	500	300	1,100	700	400
Environ science	200	100	S	300	200	100
Life sciences	2,600	1,300	1,400	14,200	9,400	4,800
Biology	2,400	1,100	1,200	12,400	8,300	4,100
Agr science	200	100	100	1,800	1,200	600
Psychology	1,300	900	400	5,400	1,500	3,900
Social sciences	1,700	700	900	9,600	4,800	4,900
Economics	400	300	S	2,600	1,400	1,200
Socio/anthro	600	S	600	1,000	S	1,000
Other soc sciences	700	400	300	6,100	3,400	2,700
Total engineering	1,900	1,600	300	3,500	2,800	700
Aero/astro	100	100	S	100	100	S
Chemical	100	100	S	300	200	S
Civil	100	100	S	300	200	100
Elect/electron	1,100	800	300	1,100	900	300
Industrial	100	100	S	200	100	100
Materials	S	S	S	100	100	S
Mechanical	300	300	S	500	400	100
Mining	S	S	S	S	S	S
Nuclear	S	S	S	S	S	S
Petroleum	S	S	S	200	200	S
Other engineering	200	200	S	700	700	S

KEY: S = Data suppressed for statistical reasons

NOTES: Because of rounding, components may not add to totals.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-3. 1988 science and engineering (S&E) bachelor's-degree recipients, by field of degree, employment status, and racial/ethnic group: 1990

Field of degree	Total population						Total employed					
	Total	White	Black	Asian	Native American	Hispanic 1/	Total	White	Black	Asian	Native American	Hispanic 1/
Total, all fields	320,000	260,900	15,600	14,700	1,400	10,400	272,500	223,600	12,600	11,300	1,100	8,900
Total sciences	246,600	201,700	12,300	9,600	900	7,300	204,500	167,700	9,700	7,300	700	6,300
Physical sciences	15,100	12,100	600	1,100	S	400	11,700	9,900	500	600	S	300
Chemistry	8,600	6,400	300	1,000	S	300	6,200	4,900	200	500	S	200
Physics/astronomy	4,600	4,100	100	100	S	100	3,900	3,600	S	100	S	100
Other phys sciences	1,900	1,600	300	S	S	S	1,700	1,500	300	S	S	S
Math/statistics	16,600	13,600	900	800	100	400	15,000	12,300	800	600	100	200
Computer science	34,500	26,500	2,000	2,700	100	1,200	32,600	25,400	1,800	2,300	100	1,100
Environ science	3,900	3,600	S	S	S	100	3,500	3,300	S	S	S	100
Life sciences	58,400	47,900	2,600	1,500	100	1,200	41,600	34,200	1,600	900	100	900
Biology	42,100	34,200	2,000	1,100	S	900	27,400	22,400	1,100	600	S	600
Agr science	16,200	13,700	600	300	S	300	14,200	11,800	500	300	S	300
Psychology	41,500	33,200	2,300	900	200	1,700	34,800	27,700	1,700	400	200	1,500
Social sciences	76,700	64,900	3,900	2,700	400	2,400	65,300	54,900	3,200	2,500	200	2,300
Economics	23,600	19,200	1,900	1,300	200	500	20,700	16,900	1,500	1,200	S	500
Socio/anthro	17,400	14,800	900	400	200	200	15,900	13,600	800	200	200	200
Other soc sciences	35,600	30,800	1,100	1,000	S	1,600	28,800	24,500	900	1,000	S	1,600
Total engineering	73,500	59,100	3,200	5,100	500	3,100	68,000	55,900	2,800	4,000	400	2,600
Aero/astro	3,400	3,100	S	100	S	200	3,200	2,900	S	100	S	100
Chemical	3,600	2,700	100	300	S	200	3,300	2,500	100	200	S	100
Civil	7,600	6,400	200	400	100	500	7,200	6,100	200	300	100	500
Elect/electron	27,200	20,200	1,600	3,000	200	1,100	24,900	19,100	1,300	2,400	200	800
Industrial	6,500	5,200	500	300	S	500	6,300	5,000	400	200	S	500
Materials	900	800	S	S	S	S	800	700	S	S	S	S
Mechanical	14,100	12,200	500	600	100	300	13,400	11,700	500	500	100	300
Mining	700	600	S	S	S	S	600	600	S	S	S	S
Nuclear	500	400	S	S	S	S	400	400	S	S	S	S
Petroleum	700	600	S	S	S	100	500	400	S	S	S	100
Other engineering	8,300	7,000	300	400	S	200	7,500	6,600	300	200	S	100

Field of degree	Employed in S&E occupation						Unemployed					
	Total	White	Black	Asian	Native American	Hispanic 1/	Total	White	Black	Asian	Native American	Hispanic 1/
Total, all fields	169,800	137,000	7,500	9,000	1,300	6,500	9,300	6,000	1,200	900	100	300
Total sciences	108,300	87,300	5,100	5,000	800	4,000	7,300	5,100	1,000	300	S	200
Physical sciences	9,800	8,100	200	600	S	300	600	300	S	S	S	S
Chemistry	5,300	3,900	200	600	S	200	400	100	S	S	S	S
Physics/astronomy	3,600	3,200	S	100	S	100	100	100	S	S	S	S
Other phys sciences	900	900	S	S	S	S	100	100	S	S	S	S
Math/statistics	11,100	9,100	400	500	100	200	200	200	S	S	S	S
Computer science	23,300	22,300	1,500	2,300	100	800	800	400	100	100	S	100
Environ science	2,700	2,500	S	S	S	100	200	100	S	S	S	S
Life sciences	28,400	23,900	1,200	800	100	600	2,600	1,500	400	200	S	100
Biology	19,300	16,100	900	600	S	400	2,400	1,400	400	200	S	S
Agr science	9,100	7,800	300	200	S	200	200	200	S	S	S	S
Psychology	10,000	7,000	500	200	200	1,100	1,300	1,300	S	S	S	S
Social sciences	18,100	14,400	1,300	500	400	900	1,700	1,200	400	S	S	S
Economics	5,900	4,900	500	S	200	S	400	200	200	S	S	S
Socio/anthro	3,500	2,800	400	S	200	S	600	500	100	S	S	S
Other soc sciences	8,700	6,700	400	500	S	900	700	600	100	S	S	S
Total engineering	61,500	49,700	2,400	4,000	500	2,500	1,900	1,000	200	600	S	100
Aero/astro	2,600	2,300	S	100	S	100	100	100	S	S	S	S
Chemical	3,100	2,400	100	200	S	100	100	S	S	S	S	S
Civil	6,700	5,600	200	300	100	500	100	100	S	S	S	S
Elect/electron	22,900	17,100	1,200	2,500	200	800	1,100	400	200	400	S	100
Industrial	5,300	4,200	300	300	S	400	100	100	S	S	S	S
Materials	800	700	S	S	S	S	S	S	S	S	S	S
Mechanical	12,600	10,900	400	500	100	300	300	200	S	100	S	S
Mining	500	500	S	S	S	S	S	S	S	S	S	S
Nuclear	400	300	S	S	S	S	S	S	S	S	S	S
Petroleum	600	600	S	S	S	100	S	S	S	S	S	S
Other engineering	6,100	5,100	200	200	S	200	200	100	S	100	S	S

See explanatory information and SOURCE at end of table.

Table B-3. 1988 science and engineering (S&E) bachelor's-degree recipients, by field of degree, employment status, and racial/ethnic group: 1990

Field of degree	Outside labor force					
	Total	White	Black	Asian	Native American	Hispanic 1/
Total, all fields	38,300	31,200	1,900	2,500	200	1,200
Total sciences	34,800	29,000	1,700	1,900	200	900
Physical sciences	2,700	1,900	100	500	S	100
Chemistry	2,100	1,400	100	400	S	100
Physics/astronomy	600	500	S	S	S	S
Other phys sciences	100	100	S	S	S	S
Math/statistics	1,400	1,100	100	100	S	200
Computer science	1,100	800	100	300	S	S
Environ science	300	200	S	S	S	S
Life sciences	14,200	12,100	500	400	S	200
Biology	12,400	10,400	500	300	S	200
Agr science	1,800	1,700	S	100	S	S
Psychology	5,400	4,200	600	400	S	200
Social sciences	9,600	8,700	300	200	200	100
Economics	2,600	2,200	200	S	200	S
Socio/anthro	1,000	800	S	200	S	S
Other soc sciences	6,100	5,700	100	S	S	100
Total engineering	3,500	2,300	200	600	S	400
Aero/astro	100	100	S	S	S	S
Chemical	300	200	S	S	S	S
Civil	300	200	S	100	S	S
Elect/electron	1,100	600	100	300	S	200
Industrial	200	100	S	S	S	S
Materials	100	100	S	S	S	S
Mechanical	500	400	S	100	S	S
Mining	S	S	S	S	S	S
Nuclear	S	S	S	S	S	S
Petroleum	200	200	S	S	S	S
Other engineering	700	300	S	100	S	100

1/ Includes members of all racial groups

KEY: S = Data suppressed for statistical reasons

NOTES: Components will not add to totals because (a) racial and ethnic categories are not mutually exclusive, (b) total includes "other" and "no report," and (c) both components and totals have been rounded.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey.

Table B-4. 1988 science and engineering (S&E) bachelor's-degree recipients, by field of degree, employment status, and sex: 1990

Field of degree	Total population			Total employed			Employed in S&E occupation		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Total, all fields	254,800	155,900	98,700	240,800	148,800	91,700	140,900	98,500	42,400
Total sciences	188,400	99,000	89,200	176,700	94,000	82,600	85,700	51,400	34,300
Physical sciences	9,200	6,600	2,600	8,600	6,100	2,500	5,900	4,200	1,700
Chemistry	5,100	3,200	1,900	4,700	2,800	1,900	3,400	2,100	1,300
Physics/astronomy	2,400	2,000	400	2,200	1,900	400	1,600	1,400	300
Other phys sciences	1,800	1,400	300	1,700	1,400	200	800	800	100
Math/statistics	13,800	6,900	6,900	13,200	6,800	6,500	9,100	4,200	4,900
Computer science	32,800	22,700	10,000	31,500	22,100	9,400	26,300	18,500	7,800
Environ science	2,700	2,000	700	2,500	1,900	600	1,800	1,400	300
Life sciences	37,700	18,300	19,400	33,900	16,800	17,200	19,000	10,400	8,600
Biology	24,900	10,900	14,000	21,600	9,500	12,200	11,400	5,100	6,300
Agr science	12,800	7,400	5,400	12,300	7,300	5,000	7,700	5,400	2,300
Psychology	33,200	10,600	22,700	31,000	9,900	21,100	8,600	3,300	5,300
Social sciences	59,000	31,900	26,900	56,000	30,500	25,300	15,000	9,400	5,600
Economics	19,100	12,400	6,700	18,700	12,000	6,700	5,200	4,200	1,000
Socio/anthro	13,600	4,200	9,400	12,900	4,200	8,700	2,600	1,100	1,500
Other soc sciences	26,300	15,300	10,700	24,400	14,300	9,900	7,200	4,100	3,100
Total engineering	66,400	56,800	9,600	64,000	54,800	9,100	55,300	47,100	8,100
Aero/astro	3,000	2,600	300	2,900	2,600	300	2,200	1,900	300
Chemical	3,100	2,100	1,000	3,100	2,100	1,000	2,700	1,800	900
Civil	6,900	5,800	1,200	6,800	5,700	1,100	6,100	5,200	900
Elect/electron	24,800	22,200	2,700	23,700	21,300	2,500	20,700	18,500	2,200
Industrial	6,300	5,300	1,000	6,100	5,200	1,000	4,900	4,100	800
Materials	700	600	100	700	600	100	600	500	100
Mechanical	12,900	11,200	1,800	12,500	10,800	1,800	11,500	9,800	1,600
Mining	500	400	100	500	400	100	500	400	100
Nuclear	400	300	100	300	300	100	300	200	100
Petroleum	500	500	S	500	400	S	500	400	S
Other engineering	7,200	5,900	1,300	6,900	5,700	1,300	5,200	4,200	1,000

See explanatory information and SOURCE at end of table.

Table B-4. 1988 science and engineering (S&E) bachelor's-degree recipients, by field of degree, employment status, and sex: 1990

Field of degree	Unemployed			Outside labor force		
	Total	Men	Women	Total	Men	Women
Total, all fields	7,700	4,800	2,900	6,400	2,300	4,200
Total sciences	6,100	3,400	2,700	5,600	1,700	3,900
Physical sciences	500	400	100	200	200	S
Chemistry	300	300	S	100	100	S
Physics/astronomy	100	100	S	S	S	S
Other phys sciences	100	S	100	S	S	S
Math/statistics	200	100	100	400	100	300
Computer science	700	400	300	500	200	300
Environ science	200	100	S	S	S	S
Life sciences	2,000	1,000	1,000	1,800	600	1,200
Biology	1,800	900	900	1,500	600	900
Agr science	200	100	100	300	S	300
Psychology	1,100	600	400	1,200	S	1,200
Social sciences	1,400	700	700	1,500	700	900
Economics	400	300	S	S	S	S
Socio/anthro	300	S	300	400	S	400
Other soc sciences	700	400	300	1,100	700	500
Total engineering	1,600	1,400	200	800	600	300
Aero/astro	100	100	S	S	S	S
Chemical	100	S	S	S	S	S
Civil	100	100	S	100	S	100
Elect/electron	900	700	100	200	100	100
Industrial	100	100	S	100	S	100
Materials	S	S	S	S	S	S
Mechanical	300	300	S	200	200	S
Mining	S	S	S	S	S	S
Nuclear	S	S	S	S	S	S
Petroleum	S	S	S	S	S	S
Other engineering	100	100	S	100	100	S

KEY: S = Data suppressed for statistical reasons

NOTES: Because of rounding, components may not add to totals.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-5. 1988 science and engineering (S&E) bachelor's-degree recipients, by field of degree, employment status, and racial/ethnic group: 1990

Field of degree	Total population					
	Total	White	Black	Asian	Native American	Hispanic 1/
Total, all fields	254,800	207,900	12,600	10,700	900	8,200
Total sciences	188,400	153,500	10,000	6,700	500	5,600
Physical sciences	9,200	7,600	500	300	S	300
Chemistry	5,100	4,000	200	300	S	200
Physics/astronomy	2,400	2,100	S	S	S	100
Other phys sciences	1,800	1,500	200	S	S	S
Math/statistics	13,800	11,400	800	500	100	400
Computer science	32,800	25,300	1,900	2,300	100	1,100
Environ science	2,700	2,500	S	S	S	100
Life sciences	37,700	30,800	1,800	700	S	500
Biology	24,900	20,000	1,200	500	S	200
Agr science	12,800	10,700	500	200	S	300
Psychology	33,200	26,600	1,700	400	200	1,200
Social sciences	59,000	49,200	3,300	2,300	S	2,100
Economics	19,100	15,700	1,600	900	S	500
Socio/anthro	13,600	11,500	700	400	S	200
Other soc sciences	26,300	22,000	1,000	1,000	S	1,400
Total engineering	66,400	54,400	2,600	4,100	400	2,600
Aero/astro	3,000	2,800	S	100	S	100
Chemical	3,100	2,300	100	200	S	100
Civil	6,900	5,900	200	300	100	500
Elect/electron	24,800	19,000	1,100	2,500	200	800
Industrial	6,300	5,000	400	300	S	500
Materials	700	600	S	S	S	S
Mechanical	12,900	11,200	500	600	100	300
Mining	500	500	S	S	S	S
Nuclear	400	300	S	S	S	S
Petroleum	500	400	S	S	S	100
Other engineering	7,200	6,400	200	100	S	100

Field of degree	Total employed					
	Total	White	Black	Asian	Native American	Hispanic 1/
Total, all fields	240,800	197,800	11,400	9,700	900	7,900
Total sciences	176,700	144,800	8,900	6,300	400	5,400
Physical sciences	8,600	7,400	500	300	S	300
Chemistry	4,700	3,900	200	200	S	200
Physics/astronomy	2,200	2,100	S	S	S	100
Other phys sciences	1,700	1,400	200	S	S	S
Math/statistics	13,200	11,000	800	500	100	200
Computer science	31,500	24,600	1,700	2,100	100	1,000
Environ science	2,500	2,300	S	S	S	100
Life sciences	33,900	28,100	1,300	700	S	400
Biology	21,600	17,800	800	500	S	200
Agr science	12,300	10,300	500	200	S	300
Psychology	31,000	24,600	1,700	400	200	1,200
Social sciences	56,000	46,800	2,900	2,100	S	2,100
Economics	18,700	15,500	1,500	900	S	500
Socio/anthro	12,900	11,000	600	200	S	200
Other soc sciences	24,400	20,300	900	1,000	S	1,400
Total engineering	64,000	53,000	2,500	3,400	400	2,600
Aero/astro	2,900	2,700	S	100	S	100
Chemical	3,100	2,300	100	200	S	100
Civil	6,800	5,700	200	200	100	500
Elect/electron	23,700	18,500	1,100	2,100	200	800
Industrial	6,100	4,900	400	200	S	500
Materials	700	600	S	S	S	S
Mechanical	12,500	10,900	400	400	100	300
Mining	500	500	S	S	S	S
Nuclear	300	300	S	S	S	S
Petroleum	500	400	S	S	S	100
Other engineering	6,900	6,200	200	100	S	100

See explanatory information and SOURCE at end of table.

Table B-5. 1988 science and engineering (S&E) bachelor's-degree recipients, by field of degree, employment status, and racial/ethnic group: 1990

Field of degree	Employed in S&E occupation					
	Total	White	Black	Asian	Native American	Hispanic 1/
Total, all fields	140,900	114,700	6,100	7,000	800	5,600
Total sciences	85,700	69,100	4,100	3,900	400	3,400
Physical sciences	5,900	5,200	200	200	S	300
Chemistry	3,400	2,900	200	100	S	200
Physics/astronomy	1,600	1,500	S	S	S	100
Other phys sciences	800	800	S	S	S	S
Math/statistics	9,100	7,600	300	400	100	200
Computer science	26,300	21,000	1,300	1,900	100	700
Environ science	1,800	1,700	S	S	S	100
Life sciences	19,000	15,800	600	600	S	400
Biology	11,400	9,300	400	500	S	200
Agr science	7,700	6,500	300	100	S	200
Psychology	8,600	6,100	500	200	200	800
Social sciences	15,000	11,800	1,200	500	S	900
Economics	5,200	4,400	500	S	S	S
Socio/anthro	2,600	2,100	400	S	S	S
Other soc sciences	7,200	5,300	200	500	S	900
Total engineering	55,300	45,500	2,000	3,100	400	2,200
Aero/astro	2,200	2,000	S	100	S	100
Chemical	2,700	2,000	100	200	S	100
Civil	6,100	5,100	200	200	100	500
Elect/electron	20,700	15,900	900	2,000	200	700
Industrial	4,900	4,000	300	200	S	400
Materials	600	600	S	S	S	S
Mechanical	11,500	10,100	300	300	100	300
Mining	500	500	S	S	S	S
Nuclear	300	300	S	S	S	S
Petroleum	500	400	S	S	S	100
Other engineering	5,200	4,700	100	100	S	100

Field of degree	Unemployed					
	Total	White	Black	Asian	Native American	Hispanic 1/
Total, all fields	7,700	5,000	1,000	600	S	200
Total sciences	6,100	4,200	900	100	S	100
Physical sciences	500	200	S	S	S	S
Chemistry	300	100	S	S	S	S
Physics/astronomy	100	S	S	S	S	S
Other phys sciences	100	100	S	S	S	S
Math/statistics	200	200	S	S	S	S
Computer science	700	400	100	100	S	100
Environ science	200	100	S	S	S	S
Life sciences	2,000	1,200	300	S	S	S
Biology	1,800	1,100	300	S	S	S
Agr science	200	100	S	S	S	S
Psychology	1,100	1,100	S	S	S	S
Social sciences	1,400	1,000	400	S	S	S
Economics	400	200	200	S	S	S
Socio/anthro	300	200	100	S	S	S
Other soc sciences	700	600	100	S	S	S
Total engineering	1,600	800	100	500	S	100
Aero/astro	100	100	S	S	S	S
Chemical	100	S	S	S	S	S
Civil	100	100	S	S	S	S
Elect/electron	900	400	100	400	S	S
Industrial	100	100	S	S	S	S
Materials	S	S	S	S	S	S
Mechanical	300	200	S	100	S	S
Mining	S	S	S	S	S	S
Nuclear	S	S	S	S	S	S
Petroleum	S	S	S	S	S	S
Other engineering	100	S	S	S	S	S

See explanatory information and SOURCE at end of table.

Table B-5. 1988 science and engineering (S&E) bachelor's-degree recipients, by field of degree, employment status, and racial/ethnic group: 1990

Field of degree	Outside labor force					
	Total	White	Black	Asian	Native American	Hispanic 1/
Total, all fields.....	6,400	5,100	200	500	S	100
Total sciences.....	5,600	4,500	200	300	S	100
Physical sciences.....	200	100	S	S	S	S
Chemistry.....	100	100	S	S	S	S
Physics/astronomy.....	S	S	S	S	S	S
Other phys sciences..	S	S	S	S	S	S
Math/statistics.....	400	300	S	S	S	100
Computer science.....	500	400	100	100	S	S
Environ science.....	S	S	S	S	S	S
Life sciences.....	1,800	1,500	100	S	S	S
Biology.....	1,500	1,200	100	S	S	S
Agr science.....	300	300	S	S	S	S
Psychology.....	1,200	900	S	S	S	S
Social sciences.....	1,500	1,300	S	200	S	S
Economics.....	S	S	S	S	S	S
Socio/anthro.....	400	200	S	200	S	S
Other soc sciences....	1,100	1,100	S	S	S	S
Total engineering.....	800	600	S	200	S	S
Aero/astro.....	S	S	S	S	S	S
Chemical.....	S	S	S	S	S	S
Civil.....	100	100	S	S	S	S
Elect/electron.....	200	100	S	100	S	S
Industrial.....	100	100	S	S	S	S
Materials.....	S	S	S	S	S	S
Mechanical.....	200	100	S	100	S	S
Mining.....	S	S	S	S	S	S
Nuclear.....	S	S	S	S	S	S
Petroleum.....	S	S	S	S	S	S
Other engineering.....	100	100	S	S	S	S

1/ Includes members of all racial groups

KEY: S = Data suppressed for statistical reasons

NOTES: Components will not add to totals because (a) racial and ethnic categories are not mutually exclusive, (b) total includes "other" and "no report," and (c) both components and totals have been rounded.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-6. 1988 science and engineering bachelor's-degree recipients, by field of degree, sex, and type of employer: 1990

Field of degree and sex	Total employed	Type of employer											
		Business and industry			Educational institutions			Non-profit orgs	Federal Government	State/local governments	Other	No report
		Total	Industry	Self-employed	Total	4-yr college univ	Other					
Total, all fields	240,500	157,200	150,800	6,400	22,900	7,700	15,100	11,500	9,900	12,600	25,400	1,100
Men	148,800	106,500	100,800	5,700	9,200	3,200	6,000	4,100	5,500	7,800	14,900	800
Women	91,700	50,700	50,000	700	13,700	4,500	9,200	7,300	4,400	4,900	10,400	400
Total sciences	176,500	107,500	102,000	5,500	22,100	7,200	14,900	10,700	5,900	9,500	20,000	900
Men	94,000	63,500	58,600	4,900	8,400	2,700	5,700	3,500	2,400	5,300	10,300	600
Women	82,600	44,000	43,400	600	13,600	4,500	9,200	7,100	3,500	4,200	9,800	300
Physical sciences	8,600	5,000	5,000	S	1,800	500	1,300	300	300	300	900	100
Men	6,100	3,500	3,500	S	1,300	400	1,000	200	100	200	700	S
Women	2,500	1,500	1,500	S	400	100	300	100	100	100	200	S
Chemistry	4,700	3,200	3,100	S	800	300	500	100	100	300	200	100
Men	2,800	1,900	1,900	S	500	300	200	100	100	100	100	S
Women	1,900	1,300	1,300	S	300	100	300	S	S	100	100	S
Physics/astronomy	2,200	1,400	1,300	S	300	200	100	100	100	100	300	S
Men	1,900	1,200	1,200	S	200	100	100	100	100	100	200	S
Women	400	200	200	S	100	100	S	100	S	S	S	S
Other phys sciences	1,700	500	500	S	700	S	700	S	100	S	400	S
Men	1,400	400	400	S	600	S	600	S	S	S	400	S
Women	200	100	100	S	S	S	S	S	100	S	S	S
Math/statistics	13,200	6,900	6,800	100	4,100	600	3,600	500	500	300	800	S
Men	6,800	4,000	3,900	100	1,600	500	1,200	200	200	100	600	S
Women	6,500	2,900	2,900	S	2,500	100	2,400	400	300	100	300	S
Computer science	31,500	25,000	24,600	400	1,900	1,100	900	500	600	1,000	2,100	300
Men	22,100	17,800	17,500	300	800	500	300	400	300	700	1,700	300
Women	9,400	7,200	7,100	S	1,100	600	500	100	300	300	400	S
Environ science	2,500	1,300	1,300	S	100	S	100	S	200	200	600	S
Men	1,900	1,000	900	S	100	S	S	S	200	100	500	S
Women	600	400	400	S	100	S	S	S	S	100	100	S
Life sciences	33,900	18,200	16,400	1,700	5,300	1,500	3,800	1,700	1,200	1,700	5,500	300
Men	16,800	9,900	8,800	1,100	2,300	800	1,600	900	500	500	2,600	S
Women	17,200	8,200	7,700	600	3,000	800	2,200	900	700	1,200	2,900	200
Biology	21,600	10,100	9,700	300	4,500	1,300	3,200	1,300	300	600	4,700	200
Men	9,500	4,700	4,400	300	2,000	600	1,500	600	S	S	2,200	S
Women	12,200	5,400	5,400	S	2,500	700	1,800	800	300	600	2,500	200
Agr science	12,300	8,100	6,700	1,400	800	200	500	400	900	1,100	900	100
Men	7,300	5,200	4,400	800	300	200	100	300	500	500	500	S
Women	5,000	2,900	2,300	600	500	100	400	100	400	600	400	S
Psychology	31,000	15,600	14,700	800	3,300	1,100	2,100	5,100	400	2,100	4,500	S
Men	9,900	5,900	5,100	800	200	S	200	1,000	S	1,300	1,500	S
Women	21,100	9,600	9,600	S	3,100	1,100	2,000	4,100	400	900	3,000	S
Social sciences	55,800	35,600	33,200	2,400	5,500	2,300	3,200	2,500	2,500	3,800	5,600	300
Men	30,500	21,300	18,900	2,400	2,100	700	1,500	900	1,000	2,400	2,600	200
Women	25,300	14,300	14,300	S	3,400	1,700	1,700	1,600	1,600	1,400	3,000	100
Economics	18,700	15,900	15,000	900	700	600	S	200	300	400	1,100	300
Men	12,000	9,900	9,000	900	500	500	S	200	300	400	700	200
Women	6,700	6,000	6,000	S	200	200	S	S	S	S	400	100
Socio/anthro	12,900	5,900	5,400	400	1,700	900	900	1,300	400	1,900	1,700	S
Men	4,200	2,100	1,700	400	400	S	400	500	S	800	400	S
Women	8,700	3,700	3,700	S	1,300	900	400	900	400	1,100	1,200	S
Other soc sciences	24,200	13,800	12,700	1,100	3,100	800	2,300	1,000	1,800	1,500	2,900	S
Men	14,300	9,300	8,200	1,100	1,200	200	1,000	200	700	1,300	1,500	S
Women	9,900	4,500	4,500	S	1,900	600	1,300	700	1,100	300	1,400	S

See explanatory information and SOURCE at end of table.

Table B-6. 1988 science and engineering bachelor's-degree recipients, by field of degree, sex, and type of employer: 1990

Field of degree and sex	Total employed	Type of employer										
		Business and industry			Educational institutions			Non-profit orgs	Federal Government	State/local governments	Other	No report
		Total	Industry	Self-employed	Total	4-yr college univ	Other					
Total engineering	64,000	49,700	48,800	900	800	500	200	800	4,000	3,200	5,300	200
Men	54,800	43,000	42,200	800	800	500	200	600	3,200	2,500	4,600	200
Women	9,100	6,700	6,600	100	S	S	S	200	800	700	700	S
Aero/astro	2,900	1,600	1,500	S	S	S	S	S	200	S	900	S
Men	2,600	1,400	1,400	S	S	S	S	S	300	S	800	S
Women	300	100	100	S	S	S	S	S	100	S	100	S
Chemical	3,000	2,600	2,600	S	100	S	S	S	200	100	100	S
Men	2,100	1,700	1,700	S	100	S	S	S	100	100	100	S
Women	1,000	800	800	S	S	S	S	S	100	S	S	S
Civil	6,800	4,200	4,000	100	100	100	S	100	300	1,600	500	S
Men	5,700	3,500	3,400	100	100	100	S	100	200	1,300	400	S
Women	1,100	700	700	S	S	S	S	S	100	300	100	S
Elect/electron	23,700	18,900	18,400	400	200	200	S	500	1,900	700	1,400	200
Men	21,300	17,000	16,700	400	200	200	S	300	1,700	600	1,300	200
Women	2,500	1,900	1,800	100	S	S	S	200	200	100	100	S
Industrial	6,100	5,200	5,000	200	100	100	S	S	300	S	500	S
Men	5,200	4,400	4,200	200	100	100	S	S	200	S	400	S
Women	1,000	800	800	S	S	S	S	S	100	S	100	S
Materials	700	600	600	S	S	S	S	S	S	S	100	S
Men	600	500	500	S	S	S	S	S	S	S	S	S
Women	100	100	100	S	S	S	S	S	S	S	S	S
Mechanical	12,500	10,700	10,700	100	100	S	100	100	700	300	500	S
Men	10,800	9,400	9,300	100	100	S	100	100	400	200	400	S
Women	1,800	1,300	1,300	S	S	S	S	S	200	100	S	S
Mining	500	500	500	S	S	S	S	S	S	S	S	S
Men	400	400	400	S	S	S	S	S	S	S	S	S
Women	100	100	100	S	S	S	S	S	S	S	S	S
Nuclear	300	100	100	S	S	S	S	S	S	S	100	S
Men	300	100	100	S	S	S	S	S	S	S	100	S
Women	100	S	S	S	S	S	S	S	S	S	S	S
Petroleum	500	400	400	S	S	S	S	S	S	S	S	S
Men	400	400	400	S	S	S	S	S	S	S	S	S
Women	S	S	S	S	S	S	S	S	S	S	S	S
Other engineering	6,900	4,900	4,900	100	100	100	100	S	200	300	1,300	S
Men	5,700	4,100	4,000	S	100	100	100	S	100	300	1,000	S
Women	1,300	900	900	S	S	S	S	S	100	S	300	S

KEY: S = Data suppressed for statistical reasons

NOTES: Because of rounding, components may not add to totals.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-7. 1988 science and engineering bachelor's-degree recipients, by field of degree, sex, and primary work activity: 1990

Field of degree and sex	Total employed	Primary work activity						
		Research and development				Management/administration		
		Total	Basic	Applied	Develop-ment	Total	Of R&D	Of non-R&D
Total, all fields	240,500	41,700	4,200	7,300	30,300	37,700	5,600	32,100
Men	148,800	29,900	1,600	4,300	24,100	22,000	3,800	18,200
Women	91,700	11,800	2,600	3,000	6,200	15,700	1,800	14,000
Total sciences	176,500	20,900	3,800	5,500	11,600	29,800	3,900	25,800
Men	94,000	11,900	1,300	2,800	7,900	15,000	2,500	12,500
Women	82,600	9,000	2,500	2,800	3,700	14,800	1,400	13,400
Physical sciences	8,600	2,400	300	800	1,200	900	100	800
Men	6,100	1,800	200	700	900	700	100	600
Women	2,500	600	100	200	400	200	S	200
Chemistry	4,700	1,500	200	400	900	600	100	500
Men	2,800	1,100	200	300	600	400	100	300
Women	1,900	500	S	100	300	200	S	200
Physics/astronomy	2,200	800	100	400	300	100	S	100
Men	1,900	700	S	400	300	100	S	100
Women	400	200	100	S	100	S	S	S
Other phys sciences	1,700	S	S	S	S	300	S	300
Men	1,400	S	S	S	S	200	S	200
Women	200	S	S	S	S	S	S	S
Math/statistics	13,200	1,000	100	200	700	1,300	200	1,100
Men	6,800	600	100	100	500	800	200	600
Women	6,500	400	S	100	300	600	100	500
Computer science	31,500	6,800	S	400	6,400	2,700	400	2,300
Men	22,100	5,100	S	300	4,700	2,100	300	1,800
Women	9,400	1,700	S	100	1,600	600	100	600
Environ science	2,500	300	S	200	S	300	S	300
Men	1,900	200	S	200	S	200	S	200
Women	600	S	S	S	S	100	S	100
Life sciences	33,900	6,800	2,500	2,900	1,400	5,200	1,000	4,200
Men	16,800	2,700	700	1,200	800	1,900	500	1,400
Women	17,200	4,100	1,800	1,700	600	3,300	500	2,800
Biology	21,600	5,100	2,400	2,200	500	2,400	200	2,200
Men	9,500	1,500	700	800	S	500	S	500
Women	12,200	3,600	1,700	1,400	500	1,900	200	1,700
Agr science	12,300	1,700	100	700	800	2,800	700	2,100
Men	7,300	1,200	100	400	700	1,400	500	900
Women	5,000	500	100	300	100	1,400	200	1,100
Psychology	31,000	1,100	600	200	200	6,400	500	6,000
Men	9,900	400	200	S	200	1,900	200	1,700
Women	21,100	700	400	200	S	4,500	200	4,300
Social sciences	55,800	2,600	200	700	1,600	12,900	1,800	11,100
Men	30,500	1,100	S	300	800	7,400	1,200	6,200
Women	25,300	1,500	200	500	800	5,500	600	4,900
Economics	18,700	300	S	S	300	5,500	800	4,800
Men	12,000	300	S	S	300	3,000	600	2,400
Women	6,700	S	S	S	S	2,500	200	2,300
Socio/anthro	12,900	700	S	500	200	2,000	200	1,700
Men	4,200	300	S	300	S	500	S	500
Women	8,700	400	S	200	200	1,500	200	1,300
Other soc sciences	24,200	1,500	200	200	1,000	5,500	900	4,600
Men	14,300	400	S	S	400	3,900	600	3,300
Women	9,900	1,100	200	200	600	1,500	200	1,300

See explanatory information and SOURCE at end of table.

Table 8-7. 1988 science and engineering bachelor's-degree recipients, by field of degree, sex, and primary work activity: 1990

Field of degree and sex	Primary work activity						
	Teaching	Production/ inspection	Reporting/ stat work/ computing	Sales	Profes- sional services	Other	No report
Total, all fields	22,500	36,300	38,100	21,100	4,300	36,200	2,500
Men	9,000	28,600	22,500	12,400	1,800	21,200	1,500
Women	13,600	7,700	15,600	8,700	2,500	15,100	1,000
Total sciences	21,500	19,500	32,300	18,700	4,200	27,700	2,000
Men	8,100	13,700	17,800	10,500	1,700	14,300	1,000
Women	13,400	5,800	14,500	8,300	2,500	13,400	1,000
Physical sciences	1,300	1,700	600	300	100	1,200	100
Men	900	1,200	400	300	S	800	S
Women	400	600	200	S	100	400	S
Chemistry	400	1,100	300	100	100	500	100
Men	100	600	200	100	S	200	S
Women	300	500	100	S	100	300	S
Physics/astronomy	200	500	200	100	S	300	S
Men	200	500	100	100	S	200	S
Women	S	S	100	S	S	100	S
Other phys sciences	700	100	S	S	S	400	S
Men	600	100	S	S	S	400	S
Women	100	S	S	S	S	S	S
Math/statistics	3,900	1,100	3,200	900	S	1,700	S
Men	1,400	700	1,600	700	S	800	S
Women	2,500	400	1,600	100	S	800	S
Computer science	700	2,800	13,800	600	100	3,700	300
Men	200	2,100	8,900	400	100	2,900	300
Women	500	700	4,900	200	S	800	S
Environ science	100	600	200	100	S	900	S
Men	100	500	200	100	S	600	S
Women	S	100	S	S	S	300	S
Life sciences	3,900	6,000	2,200	3,300	1,100	4,900	700
Men	1,700	3,400	1,100	2,400	500	2,700	500
Women	2,200	2,600	1,100	800	600	2,200	200
Biology	3,100	3,300	1,400	2,300	700	2,700	600
Men	1,500	1,500	500	1,500	400	1,600	400
Women	1,500	1,900	900	700	300	1,100	200
Agr science	800	2,700	700	1,000	400	2,200	100
Men	200	1,900	600	900	100	1,100	S
Women	600	700	200	100	300	1,200	S
Psychology	5,100	2,600	3,700	3,400	2,100	6,000	400
Men	1,000	2,300	700	1,300	600	1,500	S
Women	4,100	300	3,000	2,200	1,300	4,500	400
Social sciences	6,600	4,600	8,500	10,200	700	9,300	500
Men	2,800	3,600	5,000	5,300	200	4,900	200
Women	3,800	1,000	3,500	4,900	400	4,300	300
Economics	700	900	4,200	4,200	S	2,500	300
Men	700	400	2,700	2,900	S	1,900	200
Women	S	500	1,500	1,300	S	700	100
Socio/anthro	2,300	1,100	1,300	1,600	400	3,300	200
Men	700	900	600	700	200	400	S
Women	1,600	200	700	900	200	2,800	200
Other soc sciences	3,600	2,600	3,000	4,300	300	3,500	S
Men	1,400	2,300	1,700	1,800	S	2,600	S
Women	2,100	300	1,300	2,600	200	800	S

See explanatory information and SOURCE at end of table.

Table B-7. 1988 science and engineering bachelor's-degree recipients, by field of degree, sex, and primary work activity: 1990

Field of degree and sex	Total employed	Primary work activity						
		Research and development				Management/administration		
		Total	Basic	Applied	Develop-ment	Total	Of R&D	Of non-R&D
Total engineering	64,000	20,800	400	1,700	18,700	8,000	1,700	6,300
Men	54,800	18,000	300	1,500	16,200	7,000	1,300	5,700
Women	9,100	2,800	100	200	2,500	900	300	600
Aero/astro	2,900	1,000	100	100	800	200	100	100
Men	2,600	800	100	100	700	100	S	100
Women	300	100	S	S	100	100	100	S
Chemical	3,000	1,300	100	200	1,000	200	100	100
Men	2,100	900	S	200	700	200	100	100
Women	1,000	400	S	100	300	S	S	S
Civil	6,800	1,200	S	100	1,100	1,200	100	1,100
Men	5,700	1,100	S	100	1,000	900	100	900
Women	1,100	200	S	S	200	200	S	200
Elect/electron	23,700	9,400	100	700	8,600	2,600	900	1,700
Men	21,300	8,800	100	700	8,000	2,300	700	1,600
Women	2,500	600	S	S	600	300	200	100
Industrial	6,100	1,000	S	100	800	1,200	200	1,000
Men	5,200	900	S	100	700	1,100	200	900
Women	1,000	100	S	S	100	200	S	100
Materials	700	300	S	S	200	S	S	S
Men	600	200	S	S	200	S	S	S
Women	100	100	S	S	S	S	S	S
Mechanical	12,500	5,100	100	300	4,800	800	S	800
Men	10,800	4,200	100	300	3,800	700	S	700
Women	1,800	1,000	S	S	1,000	100	S	100
Mining	500	S	S	S	S	100	S	100
Men	400	S	S	S	S	100	S	100
Women	100	S	S	S	S	S	S	S
Nuclear	300	100	S	100	S	100	S	100
Men	300	S	S	S	S	100	S	100
Women	100	100	S	S	S	S	S	S
Petroleum	500	100	S	S	100	S	S	S
Men	400	100	S	S	S	S	S	S
Women	S	S	S	S	S	S	S	S
Other engineering	6,900	1,400	100	100	1,300	1,500	300	1,200
Men	5,700	1,200	100	S	1,100	1,500	300	1,200
Women	1,300	300	S	100	200	100	S	S

See explanatory information and SOURCE at end of table.

Table B-7. 1988 science and engineering bachelor's-degree recipients, by field of degree, sex, and primary work activity: 1990

Field of degree and sex	Primary work activity						
	Teaching	Production/ inspection	Reporting/ stat work/ computing	Sales	Profes- sional services	Other	No report
Total engineering	1,000	16,800	5,800	2,400	100	8,500	500
Men	800	14,900	4,700	1,900	100	6,900	500
Women	200	1,900	1,100	500	S	1,700	S
Aero/astro	100	800	100	S	S	700	S
Men	100	700	100	S	S	600	S
Women	S	100	S	S	S	S	S
Chemical	S	800	300	S	S	300	S
Men	S	500	200	S	S	200	S
Women	S	300	100	S	S	100	S
Civil	100	1,600	400	100	S	1,800	300
Men	100	1,400	400	100	S	1,400	300
Women	S	200	100	S	S	400	S
Elect/electron	100	6,000	2,800	700	S	1,900	200
Men	S	5,400	2,200	600	S	1,700	200
Women	100	600	500	100	S	200	S
Industrial	S	2,200	600	300	100	700	S
Men	S	2,000	500	200	100	500	S
Women	S	200	100	100	S	200	S
Materials	S	300	S	S	S	100	S
Men	S	200	S	S	S	100	S
Women	S	S	S	S	S	S	S
Mechanical	300	3,000	800	700	S	1,800	S
Men	300	2,600	700	700	S	1,600	S
Women	S	400	100	S	S	200	S
Mining	S	100	100	S	S	100	S
Men	S	100	100	S	S	100	S
Women	S	S	S	S	S	S	S
Nuclear	S	100	S	S	S	S	S
Men	S	100	S	S	S	S	S
Women	S	S	S	S	S	S	S
Petroleum	S	300	S	S	S	S	S
Men	S	300	S	S	S	S	S
Women	S	S	S	S	S	S	S
Other engineering	300	1,600	500	400	S	1,200	S
Men	300	1,500	400	200	S	700	S
Women	S	200	100	200	S	500	S

KEY: S = Data suppressed for statistical reasons

NOTES: Because of rounding, components may not add to totals.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-8. 1988 science and engineering bachelor's-degree recipients, by field of degree, type of employer, and primary work activity: 1990

Field of degree and type of employer	Total employed	Primary work activity						
		Research and development				Management/administration		
		Total	Basic	Applied	Develop-ment	Total	Of R&D	Of non-R&D
Total, all fields	240,800	41,700	4,200	7,300	30,300	37,700	5,600	32,100
Business and Industry	157,400	30,500	1,400	3,400	25,700	26,400	3,400	23,000
Industry	151,100	30,400	1,400	3,400	25,600	24,300	3,100	21,200
Self employed	6,400	100	S	S	100	2,000	200	1,800
Educ inst, total	22,900	3,100	1,400	1,200	500	1,400	S	1,400
4-yr college/univ.	7,700	1,900	600	700	500	900	S	900
Other	15,100	1,200	800	500	S	500	S	500
Nonprofit orgs	11,500	800	400	100	300	2,600	900	1,600
Federal Government	9,900	2,500	100	600	1,900	1,500	300	1,200
State/local govt	12,600	2,000	400	600	1,000	1,500	400	1,200
Other	25,400	2,700	500	1,400	800	4,400	600	3,800
No report	1,100	100	S	S	100	S	S	S
Total sciences	176,700	20,900	3,800	5,500	11,600	29,800	3,900	25,800
Business and Industry	107,700	13,000	1,100	2,300	9,600	21,100	2,300	18,800
Industry	102,300	13,000	1,100	2,300	9,600	19,300	2,100	17,200
Self employed	5,500	100	S	S	100	1,800	200	1,600
Educ inst, total	22,100	2,900	1,400	1,100	300	1,400	S	1,400
4-yr college/univ.	7,200	1,700	600	700	300	900	S	900
Other	14,900	1,200	800	400	S	500	S	500
Nonprofit orgs	10,700	700	400	100	200	2,500	900	1,500
Federal Government	5,900	1,100	S	200	900	1,000	200	900
State/local govt	9,500	1,200	400	500	300	1,100	200	900
Other	20,000	1,900	500	1,200	200	2,700	400	2,300
No report	900	S	S	S	S	S	S	S
Physical sciences	8,600	2,400	300	800	1,200	900	100	800
Business and Industry	5,000	1,800	100	600	1,100	600	100	600
Industry	5,000	1,800	100	600	1,100	600	100	600
Self employed	S	S	S	S	S	S	S	S
Educ inst, total	1,800	300	100	100	100	S	S	S
4-yr college/univ.	500	100	S	100	S	S	S	S
Other	1,300	200	100	S	S	S	S	S
Nonprofit orgs	300	200	100	100	S	S	S	S
Federal Government	300	100	S	S	S	S	S	S
State/local govt	300	S	S	S	S	S	S	S
Other	900	S	S	S	S	200	S	200
No report	100	S	S	S	S	S	S	S
Math/statistics	13,200	1,000	100	200	700	1,300	200	1,100
Business and Industry	6,900	800	S	200	600	1,000	200	800
Industry	6,800	800	S	200	600	1,000	200	800
Self employed	100	S	S	S	S	S	S	S
Educ inst, total	4,100	S	S	S	S	S	S	S
4-yr college/univ.	600	S	S	S	S	S	S	S
Other	3,600	S	S	S	S	S	S	S
Nonprofit orgs	500	100	S	S	100	S	S	S
Federal Government	500	100	S	S	100	S	S	S
State/local govt	300	S	S	S	S	100	S	100
Other	800	100	100	S	S	100	S	100
No report	S	S	S	S	S	S	S	S
Computer science	31,500	6,800	S	400	6,400	2,700	400	2,300
Business and Industry	25,000	5,900	S	200	5,600	2,100	300	1,700
Industry	24,600	5,800	S	200	5,600	2,000	300	1,600
Self employed	400	S	S	S	S	100	S	100
Educ inst, total	1,900	400	S	100	300	S	S	S
4-yr college/univ.	1,100	400	S	100	300	S	S	S
Other	900	100	S	100	S	S	S	S
Nonprofit orgs	500	100	S	S	100	100	S	100
Federal Government	600	200	S	S	200	100	S	100
State/local govt	1,000	100	S	S	100	100	S	100
Other	2,100	200	S	S	200	300	S	300
No report	300	S	S	S	S	S	S	S

See explanatory information and SOURCE at end of table.

Table B-8. 1988 science and engineering bachelor's-degree recipients, by field of degree, type of employer, and primary work activity: 1990

Field of degree and type of employer	Primary work activity						
	Teaching	Production/ inspection	Reporting/ stat work/ computing	Sales	Profes- sional services	Other	No report
Total, all fields.....	22,500	36,300	38,100	21,100	4,300	36,500	2,500
Business and Industry.....	2,600	27,800	28,100	18,900	500	22,000	700
Industry.....	2,400	26,300	27,800	18,900	300	20,000	700
Self employed.....	200	1,500	200	100	200	2,000	S
Educ inst, total....	12,800	900	1,600	400	600	1,700	200
4-yr college/univ.	800	400	1,500	200	300	1,500	200
Other.....	12,000	500	100	200	300	300	S
Nonprofit orgs.....	2,200	800	800	100	1,100	3,000	200
Federal Government..	900	1,800	1,600	400	S	1,200	S
State/local govt....	900	1,700	2,900	300	S	3,100	200
Other.....	3,100	3,300	3,100	1,000	2,100	5,500	200
No report.....	S	S	S	S	S	S	1,000
Total sciences.....	21,500	19,500	32,300	18,700	4,200	27,900	2,000
Business and Industry.....	2,400	14,500	23,500	16,800	500	15,700	200
Industry.....	2,200	13,200	23,400	16,800	300	13,900	200
Self employed.....	200	1,300	100	S	200	1,800	S
Educ inst, total....	12,600	800	1,600	400	600	1,600	200
4-yr college/univ.	800	200	1,500	200	300	1,400	200
Other.....	11,800	500	100	200	300	300	S
Nonprofit orgs.....	2,200	600	800	100	1,100	2,600	200
Federal Government..	800	500	1,100	400	S	900	S
State/local govt....	900	800	2,300	200	S	2,700	200
Other.....	2,700	2,300	2,900	900	2,100	4,400	200
No report.....	S	S	S	S	S	S	900
Physical sciences.....	1,300	1,700	600	300	100	1,200	100
Business and Industry.....	100	1,500	200	300	S	600	S
Industry.....	100	1,400	200	300	S	600	S
Self employed.....	S	S	S	S	S	S	S
Educ inst, total....	1,100	S	200	S	100	S	S
4-yr college/univ.	S	S	200	S	100	S	S
Other.....	1,100	S	S	S	S	S	S
Nonprofit orgs.....	S	S	S	S	S	S	S
Federal Government..	100	S	100	S	S	S	S
State/local govt....	S	100	100	S	S	100	S
Other.....	S	100	S	S	S	500	S
No report.....	S	S	S	S	S	S	100
Math/statistics.....	3,900	1,100	3,200	900	S	1,700	S
Business and Industry.....	S	800	2,500	800	S	900	S
Industry.....	S	700	2,500	800	S	900	S
Self employed.....	S	100	S	S	S	S	S
Educ inst, total....	3,800	100	300	S	S	S	S
4-yr college/univ.	200	100	200	S	S	S	S
Other.....	3,500	S	S	S	S	S	S
Nonprofit orgs.....	100	S	100	100	S	200	S
Federal Government..	S	100	100	S	S	300	S
State/local govt....	S	S	100	S	S	S	S
Other.....	100	200	100	S	S	200	S
No report.....	S	S	S	S	S	S	S
Computer science.....	700	2,800	13,800	600	100	3,700	300
Business and Industry.....	200	2,100	11,200	600	S	2,900	S
Industry.....	100	2,100	11,200	600	S	2,800	S
Self employed.....	100	S	S	S	S	100	S
Educ inst, total....	500	300	400	S	S	300	S
4-yr college/univ.	100	S	400	S	S	200	S
Other.....	400	300	100	S	S	S	S
Nonprofit orgs.....	S	S	300	S	S	S	S
Federal Government..	S	S	400	S	S	S	S
State/local govt....	S	100	700	S	S	100	S
Other.....	S	200	800	S	100	400	S
No report.....	S	S	S	S	S	S	300

See explanatory information and SOURCE at end of table.

Table 8-8. 1988 science and engineering bachelor's-degree recipients, by field of degree, type of employer, and primary work activity: 1990

Field of degree and type of employer	Total employed	Primary work activity						
		Research and development				Management/administration		
		Total	Basic	Applied	Develop-ment	Total	Of R&D	Of non-R&D
Environ science	2,500	300	S	200	S	300	S	300
Business and Industry	1,300	100	S	100	S	100	S	100
Industry	1,300	100	S	100	S	100	S	100
Self employed	S	S	S	S	S	S	S	S
Educ inst, total	100	S	S	S	S	S	S	S
4-yr college/univ.	S	S	S	S	S	S	S	S
Other	100	S	S	S	S	S	S	S
Nonprofit orgs	S	S	S	S	S	S	S	S
Federal Government	200	S	S	S	S	S	S	S
State/local govt	200	100	S	100	S	S	S	S
Other	600	S	S	S	S	100	S	100
Life sciences	33,900	6,800	2,500	2,900	1,400	5,200	1,000	4,200
Business and Industry	18,200	2,600	500	800	1,200	3,500	300	3,100
Industry	16,400	2,500	500	800	1,200	3,000	300	2,700
Self employed	1,700	S	S	S	S	500	S	500
Educ inst, total	5,300	2,100	1,300	900	S	300	S	300
4-yr college/univ.	1,500	1,100	600	600	S	300	S	300
Other	3,800	1,000	700	300	S	S	S	S
Nonprofit orgs	1,700	300	300	S	S	600	500	100
Federal Government	1,200	300	S	200	100	500	200	300
State/local govt	1,700	500	200	300	S	200	S	200
Other	5,500	900	200	700	S	200	S	200
No report	300	S	S	S	S	S	S	S
Psychology	31,000	1,100	600	200	200	6,400	500	6,000
Business and Industry	15,600	400	200	S	200	4,900	500	4,400
Industry	14,700	400	200	S	200	4,700	500	4,200
Self employed	800	S	S	S	S	200	S	200
Educ inst, total	3,300	S	S	S	S	700	S	700
4-yr college/univ.	1,100	S	S	S	S	400	S	400
Other	2,100	S	S	S	S	200	S	200
Nonprofit orgs	5,100	S	S	S	S	700	S	700
Federal Government	400	S	S	S	S	200	S	200
State/local govt	2,100	200	200	S	S	S	S	S
Other	4,500	400	200	200	S	S	S	S
Social sciences	56,000	2,600	200	700	1,600	12,900	1,800	11,100
Business and Industry	35,800	1,500	200	400	800	8,900	800	8,100
Industry	33,400	1,500	200	400	800	7,900	600	7,200
Self employed	2,400	S	S	S	S	1,000	200	900
Educ inst, total	5,500	S	S	S	S	400	S	400
4-yr college/univ.	2,300	S	S	S	S	200	S	200
Other	3,200	S	S	S	S	200	S	200
Nonprofit orgs	2,500	S	S	S	S	1,100	500	700
Federal Government	2,500	500	S	S	500	200	S	200
State/local govt	3,800	300	S	100	200	600	200	400
Other	5,600	200	S	200	S	1,700	400	1,300
No report	300	S	S	S	S	S	S	S
Total engineering	64,000	20,800	400	1,700	18,700	8,000	1,700	6,300
Business and Industry	49,700	17,400	300	1,100	16,100	5,300	1,100	4,200
Industry	48,800	17,400	300	1,100	16,000	5,100	1,100	4,000
Self employed	900	100	S	S	100	300	100	200
Educ inst, total	800	200	S	100	200	S	S	S
4-yr college/univ.	500	200	S	S	200	S	S	S
Other	200	S	S	S	S	S	S	S
Nonprofit orgs	800	100	S	S	100	100	S	100
Federal Government	4,000	1,400	100	400	1,000	500	100	300
State/local govt	3,200	800	S	100	700	400	200	300
Other	5,300	800	S	100	600	1,700	200	1,500
No report	200	100	S	S	100	S	S	S

See explanatory information and SOURCE at end of table.

Table B-8. 1988 science and engineering bachelor's-degree recipients, by field of degree, type of employer, and primary work activity: 1990

Field of degree and type of employer	Primary work activity						
	Teaching	Production/ inspection	Reporting/ stat work/ computing	Sales	Profes- sional services	Other	No report
Environ science	100	600	200	100	S	900	S
Business and Industry	S	300	100	100	S	600	S
Industry	S	300	100	100	S	600	S
Self employed	S	S	S	S	S	S	S
Educ inst, total	100	S	S	S	S	S	S
4-yr college/univ.	S	S	S	S	S	S	S
Other	100	S	S	S	S	S	S
Nonprofit orgs	S	S	S	S	S	S	S
Federal Government	S	100	100	S	S	S	S
State/local govt	S	100	S	S	S	S	S
Other	S	100	S	S	S	300	S
Life sciences	3,900	6,000	2,200	3,300	1,100	4,900	700
Business and Industry	300	4,500	1,200	2,800	300	2,900	200
Industry	300	4,000	1,200	2,800	300	2,200	200
Self employed	S	500	S	S	S	700	S
Educ inst, total	2,500	100	S	S	S	200	S
4-yr college/univ.	S	100	S	S	S	S	S
Other	2,500	S	S	S	S	200	S
Nonprofit orgs	600	300	S	S	S	S	S
Federal Government	S	100	S	S	S	300	S
State/local govt	S	300	100	S	S	500	S
Other	500	700	900	400	800	900	200
No report	S	S	S	S	S	S	300
Psychology	5,100	2,600	3,700	3,400	2,100	6,000	400
Business and Industry	1,000	1,700	1,700	3,400	S	2,400	S
Industry	1,000	1,300	1,700	3,400	S	2,200	S
Self employed	S	400	100	S	S	200	S
Educ inst, total	1,700	200	200	S	200	200	S
4-yr college/univ.	S	S	200	S	200	200	S
Other	1,700	200	S	S	S	S	S
Nonprofit orgs	800	200	200	S	1,100	1,900	200
Federal Government	S	S	S	S	S	200	S
State/local govt	400	S	900	S	S	400	200
Other	1,100	500	700	S	800	800	S
Social sciences	6,600	4,600	8,500	10,200	700	9,500	500
Business and Industry	800	3,700	6,500	8,800	200	5,500	S
Industry	600	3,500	6,500	8,800	S	4,700	S
Self employed	200	200	S	S	200	800	S
Educ inst, total	3,000	S	500	400	200	800	200
4-yr college/univ.	400	S	500	200	S	800	200
Other	2,600	S	S	200	200	S	S
Nonprofit orgs	700	S	200	S	S	400	S
Federal Government	800	200	500	400	S	S	S
State/local govt	400	200	400	200	S	1,500	S
Other	1,000	400	400	500	300	1,200	S
No report	S	S	S	S	S	S	300
Total engineering	1,000	16,900	5,800	2,400	100	8,500	500
Business and Industry	200	13,300	4,600	2,200	S	6,300	400
Industry	200	13,100	4,500	2,100	S	6,100	400
Self employed	S	200	100	S	S	200	S
Educ inst, total	300	200	S	S	S	100	S
4-yr college/univ.	S	200	S	S	S	100	S
Other	200	S	S	S	S	S	S
Nonprofit orgs	S	200	S	S	S	400	S
Federal Government	100	1,300	400	S	S	300	S
State/local govt	S	900	600	100	S	400	S
Other	400	1,000	200	100	100	1,100	S
No report	S	S	S	S	S	S	100

KEY: S = Data suppressed for statistical reasons

NOTES: Because of rounding, components may not add to totals.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-9. 1988 science and engineering (S&E) bachelor's-degree recipients, by field of degree and field of employment: 1990

Field of degree	Total employed	Employed in non S&E occupation	Employed in S&E occupation	S&E field of employment				
				Chemistry	Physics/ astronomy	Other physical sciences	Math/ stat	Computer science
Total, all fields.....	240,800	99,800	140,900	4,000	500	2,000	9,400	38,400
Total sciences.....	176,700	91,100	85,700	4,000	500	2,000	7,200	32,300
Physical sciences.....	8,600	2,600	5,900	2,700	200	1,100	100	500
Chemistry.....	4,700	1,200	3,400	2,500	S	200	100	200
Physics/astronomy.....	2,200	600	1,600	300	200	200	S	300
Other phys sciences...	1,700	800	800	S	S	600	S	100
Math/statistics.....	13,200	4,200	9,100	S	300	S	5,200	2,500
Computer science.....	31,500	5,200	26,300	S	S	S	400	24,200
Environ science.....	2,500	700	1,800	S	S	100	S	S
Life sciences.....	33,900	14,900	19,000	1,000	S	300	300	1,500
Biology.....	21,600	10,300	11,400	800	S	300	200	1,000
Agr science.....	12,300	4,600	7,700	200	S	S	100	500
Psychology.....	31,000	22,400	8,600	S	S	500	700	1,700
Social sciences.....	56,000	41,000	15,000	200	S	S	600	1,800
Economics.....	18,700	13,500	5,200	S	S	S	200	1,300
Socio/anthro.....	12,900	10,300	2,600	S	S	S	S	100
Other soc sciences....	24,400	17,200	7,200	200	S	S	400	400
Total engineering.....	64,000	8,800	55,300	S	S	100	2,200	6,100
Aero/astro.....	2,900	700	2,200	S	S	100	100	100
Chemical.....	3,100	400	2,700	S	S	S	100	100
Civil.....	6,800	700	6,100	S	S	S	100	S
Elect/electron.....	23,700	3,000	20,700	S	S	S	700	4,200
Industrial.....	6,100	1,200	4,900	S	S	S	400	300
Materials.....	700	100	600	S	S	S	S	S
Mechanical.....	12,500	1,000	11,500	S	S	S	500	700
Mining.....	500	S	500	S	S	S	S	S
Nuclear.....	300	S	300	S	S	S	S	S
Petroleum.....	500	S	500	S	S	S	S	S
Other engineering.....	6,900	1,700	5,200	S	S	S	200	600

Field of degree	S&E field of employment							
	Environ science	Biology	Agric science	Psychology	Economics	Sociology anthro-pology	Other social sciences	Engineering
Total, all fields.....	2,000	8,500	6,700	2,800	2,800	1,900	6,800	55,100
Total sciences.....	1,800	8,400	6,300	2,800	2,800	1,900	6,800	9,000
Physical sciences.....	100	300	S	S	S	S	S	900
Chemistry.....	S	300	S	S	S	S	S	200
Physics/astronomy.....	100	S	S	S	S	S	S	600
Other phys sciences...	S	S	S	S	S	S	S	100
Math/statistics.....	S	S	S	S	S	100	100	900
Computer science.....	S	S	S	S	S	S	100	1,500
Environ science.....	1,300	S	S	S	S	S	S	400
Life sciences.....	S	7,800	4,900	200	200	S	300	2,400
Biology.....	S	7,400	700	S	S	S	S	1,100
Agr science.....	S	400	4,300	200	200	S	300	1,300
Psychology.....	S	200	200	2,500	S	500	1,100	1,300
Social sciences.....	400	S	1,000	100	2,600	1,300	5,200	1,700
Economics.....	S	S	200	S	2,400	S	200	1,000
Socio/anthro.....	200	S	S	100	200	1,300	600	S
Other soc sciences....	200	S	900	S	S	S	4,400	700
Total engineering.....	200	100	400	S	S	S	S	46,100
Aero/astro.....	S	S	S	S	S	S	S	1,900
Chemical.....	S	S	100	S	S	S	S	2,300
Civil.....	S	S	S	S	S	S	S	6,000
Elect/electron.....	S	S	100	S	S	S	S	15,700
Industrial.....	S	S	S	S	S	S	S	4,200
Materials.....	S	S	S	S	S	S	S	600
Mechanical.....	S	S	100	S	S	S	S	10,100
Mining.....	100	S	S	S	S	S	S	400
Nuclear.....	S	S	S	S	S	S	S	300
Petroleum.....	S	S	S	S	S	S	S	400
Other engineering.....	100	S	100	S	S	S	S	4,100

KEY: S = Data suppressed for statistical reasons

NOTES: Because of rounding, components may not add to totals.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-10. 1988 science and engineering (S&E) bachelor's-degree recipients employed in S&E occupations, by field of degree, type of employer, and primary work activity: 1990

Field of degree	Employed in S&E occupation	Primary work activity						
		Research and development				Management/administration		
		Total	Basic	Applied	Develop-ment	Total	Of R&D	Of non-R&D
Total, all fields.....	140,900	37,000	3,200	5,800	28,000	13,700	2,600	11,200
Business and Industry.....	95,300	27,400	1,100	2,700	23,600	9,000	1,600	7,400
Industry.....	92,500	27,200	1,100	2,700	23,500	7,700	1,600	6,100
Self employed.....	2,800	100	S	S	100	1,300	S	1,300
Educ inst, total....	12,900	2,800	1,200	1,100	500	S	S	S
4-yr college/univ.	3,900	1,200	600	700	500	S	S	S
Other.....	9,000	1,000	500	400	S	S	S	S
Nonprofit orgs.....	5,900	800	400	100	300	800	200	500
Federal Government..	8,200	2,500	100	600	1,800	1,000	200	800
State/local govt....	8,300	1,600	200	500	900	1,200	200	1,000
Other.....	10,200	1,900	300	800	800	1,800	400	1,400
No report.....	S	S	S	S	S	S	S	S
Total sciences.....	85,700	17,300	2,900	4,300	10,100	8,400	1,200	7,200
Business and Industry.....	51,300	10,900	800	1,900	8,200	5,100	600	4,500
Industry.....	48,700	10,800	800	1,900	8,100	3,800	600	3,200
Self employed.....	2,500	100	S	S	100	1,300	S	1,300
Educ inst, total....	12,300	2,600	1,100	1,100	300	S	S	S
4-yr college/univ.	3,400	1,600	600	700	300	S	S	S
Other.....	8,900	900	500	400	S	S	S	S
Nonprofit orgs.....	5,400	700	400	100	200	800	200	500
Federal Government..	4,500	1,000	S	200	900	700	100	600
State/local govt....	5,200	900	200	400	300	800	S	800
Other.....	7,000	1,200	300	700	200	1,000	200	800
Physical sciences.....	5,900	2,100	300	800	1,100	300	S	300
Business and Industry.....	3,800	1,600	100	600	1,000	200	S	200
Industry.....	3,700	1,600	100	600	1,000	200	S	200
Self employed.....	S	S	S	S	S	S	S	S
Educ inst, total....	1,400	300	100	100	100	S	S	S
4-yr college/univ.	400	100	S	100	S	S	S	S
Other.....	900	100	100	S	S	S	S	S
Nonprofit orgs.....	200	200	100	100	S	S	S	S
Federal Government..	100	S	S	S	S	S	S	S
State/local govt....	200	S	S	S	S	S	S	S
Other.....	300	S	S	S	S	100	S	100
Math/statistics.....	9,100	900	100	100	700	400	100	300
Business and Industry.....	4,200	700	S	100	600	400	100	200
Industry.....	4,200	700	S	100	600	400	100	200
Self employed.....	100	S	S	S	S	S	S	S
Educ inst, total....	3,500	S	S	S	S	S	S	S
4-yr college/univ.	400	S	S	S	S	S	S	S
Other.....	3,100	S	S	S	S	S	S	S
Nonprofit orgs.....	200	100	S	S	100	S	S	S
Federal Government..	500	100	S	S	100	S	S	S
State/local govt....	200	S	S	S	S	100	S	100
Other.....	300	100	100	S	S	S	S	S
Computer science.....	26,300	6,500	S	300	6,200	1,500	400	1,200
Business and Industry.....	21,700	5,600	S	100	5,400	1,200	300	900
Industry.....	21,400	5,600	S	100	5,400	1,200	300	900
Self employed.....	300	S	S	S	S	S	S	S
Educ inst, total....	1,400	400	S	100	300	S	S	S
4-yr college/univ.	900	400	S	100	300	S	S	S
Other.....	500	100	S	100	S	S	S	S
Nonprofit orgs.....	400	100	S	S	100	100	S	100
Federal Government..	600	200	S	S	200	S	S	S
State/local govt....	1,000	100	S	S	100	100	S	100
Other.....	1,200	200	S	S	200	100	S	100

See explanatory information and SOURCE at end of table.

Table B-10. 1989 science and engineering (S&E) bachelor's-degree recipients employed in S&E occupations, by field of degree, type of employer, and primary work activity: 1990

Field of degree	Primary work activity						
	Teaching	Production/ inspection	Reporting/ stat work/ computing	Sales	Profes- sional services	Other	No report
Total, all fields	11,200	26,500	28,900	4,400	1,900	17,000	400
Business and Industry	1,000	20,400	21,800	3,900	300	11,200	300
Industry	1,000	19,900	21,600	3,900	300	10,700	300
Self employed	100	500	200	S	S	500	S
Educ inst, total	7,800	500	1,300	200	100	300	S
4-yr college/univ.	200	200	1,200	S	100	200	S
Other	7,500	300	100	200	S	S	S
Nonprofit orgs	700	500	800	S	800	1,500	S
Federal Government	400	1,700	1,500	200	S	900	S
State/local govt	200	1,400	2,400	100	S	1,300	S
Other	1,000	2,000	1,100	S	700	1,800	S
No report	S	S	S	S	S	S	S
Total sciences	10,600	11,400	23,300	3,000	1,900	9,800	S
Business and Industry	900	8,500	17,500	2,600	300	5,600	S
Industry	800	7,900	17,400	2,600	300	5,200	S
Self employed	100	500	100	S	S	500	S
Educ inst, total	7,600	300	1,300	200	100	200	S
4-yr college/univ.	200	100	1,200	S	100	200	S
Other	7,400	300	100	200	S	S	S
Nonprofit orgs	700	300	800	S	800	1,300	S
Federal Government	300	500	1,100	200	S	600	S
State/local govt	200	500	1,800	S	S	900	S
Other	800	1,300	900	S	700	1,100	S
Physical sciences	900	1,500	400	S	100	500	S
Business and Industry	100	1,300	200	S	S	400	S
Industry	100	1,300	200	S	S	400	S
Self employed	S	S	S	S	S	S	S
Educ inst, total	800	S	200	S	100	S	S
4-yr college/univ.	S	S	200	S	100	S	S
Other	800	S	S	S	S	S	S
Nonprofit orgs	S	S	S	S	S	—	S
Federal Government	S	S	S	S	S	S	S
State/local govt	S	100	S	S	S	S	S
Other	S	100	S	S	S	100	S
Math/statistics	3,300	700	2,800	S	S	1,000	S
Business and Industry	S	400	2,200	S	S	600	S
Industry	S	300	2,200	S	S	600	S
Self employed	S	100	S	S	S	S	S
Educ inst, total	3,200	S	300	S	S	S	S
4-yr college/univ.	200	S	200	S	S	S	S
Other	3,100	S	S	S	S	S	S
Nonprofit orgs	100	S	100	S	S	S	S
Federal Government	S	100	100	S	S	300	S
State/local govt	S	S	100	S	S	S	S
Other	S	200	S	S	S	S	S
Computer science	600	2,100	13,100	200	S	2,200	S
Business and Industry	200	1,800	10,800	200	S	1,800	S
Industry	100	1,800	10,800	200	S	1,700	S
Self employed	100	S	S	S	S	100	S
Educ inst, total	400	S	400	S	S	200	S
4-yr college/univ.	S	S	300	S	S	100	S
Other	300	S	S	S	S	S	S
Nonprofit orgs	S	S	300	S	S	S	S
Federal Government	S	S	400	S	S	100	S
State/local govt	S	100	700	S	S	200	S
Other	S	200	600	S	S	200	S

See explanatory information and SOURCE at end of table.

Table B-10. 1988 science and engineering (S&E) bachelor's-degree recipients employed in S&E occupations, by field of degree, type of employer, and primary work activity: 1990

Field of degree	Employed in S&E occupation	Primary work activity						
		Research and development				Management/administration		
		Total	Basic	Applied	Develop-ment	Total	Of R&D	Of non-R&D
Environ science	1,800	300	S	200	S	100	S	100
Business and Industry	900	100	S	100	S	S	S	S
Industry	900	100	S	100	S	S	S	S
Educ inst, total	100	S	S	S	S	S	S	S
4-yr college/univ.	S	S	S	S	S	S	S	S
Other	S	S	S	S	S	S	S	S
Federal Government	200	S	S	S	S	S	S	S
State/local govt	200	100	S	100	S	S	S	S
Other	400	S	S	S	S	S	S	S
Life sciences	19,000	5,600	2,200	2,300	1,000	2,000	500	1,500
Business and Industry	10,000	2,000	500	600	900	1,200	100	1,100
Industry	8,900	2,000	500	600	900	700	100	600
Self employed	1,100	S	S	S	S	500	S	500
Educ inst, total	4,000	1,800	1,000	900	S	S	S	S
4-yr college/univ.	1,200	1,100	600	600	S	S	S	S
Other	2,800	700	400	300	S	S	S	S
Nonprofit orgs	900	300	300	S	S	200	200	S
Federal Government	900	300	S	200	100	200	100	100
State/local govt	1,200	500	200	300	S	200	S	200
Other	2,000	700	200	500	S	200	S	200
Psychology	8,600	200	S	200	S	1,100	S	1,100
Business and Industry	3,300	S	S	S	S	600	S	600
Industry	3,000	S	S	S	S	400	S	400
Self employed	300	S	S	S	S	200	S	200
Educ inst, total	200	S	S	S	S	S	S	S
Other	200	S	S	S	S	S	S	S
Nonprofit orgs	2,800	S	S	S	S	200	S	200
Federal Government	200	S	S	S	S	200	S	200
State/local govt	800	S	S	S	S	S	S	S
Other	1,200	200	S	200	S	S	S	S
Social sciences	15,000	1,600	200	400	1,000	2,900	200	2,700
Business and Industry	7,400	900	200	400	200	1,400	S	1,400
Industry	6,600	900	200	400	200	800	S	800
Self employed	800	S	S	S	S	600	S	600
Educ inst, total	1,700	S	S	S	S	S	S	S
4-yr college/univ.	500	S	S	S	S	S	S	S
Other	1,200	S	S	S	S	S	S	S
Nonprofit orgs	900	S	S	S	S	200	S	200
Federal Government	1,900	500	S	S	500	200	S	200
State/local govt	1,600	200	S	S	200	400	S	400
Other	1,500	S	S	S	S	700	200	400
Total engineering	55,300	19,700	300	1,500	17,900	5,400	1,400	4,000
Business and Industry	44,100	16,500	200	800	15,400	3,900	1,000	2,900
Industry	43,800	16,400	200	800	15,400	3,900	1,000	2,900
Self employed	300	100	S	S	100	S	S	S
Educ inst, total	600	200	S	S	200	S	S	S
4-yr college/univ.	500	200	S	S	200	S	S	S
Other	200	S	S	S	S	S	S	S
Nonprofit orgs	500	100	S	S	100	S	S	S
Federal Government	3,700	1,400	100	400	1,000	300	100	300
State/local govt	3,100	700	S	100	600	400	100	200
Other	3,200	700	S	100	600	800	200	600
No report	S	S	S	S	S	S	S	S

See explanatory information and SOURCE at end of table.

Table B-10. 1988 science and engineering (S&E) bachelor's-degree recipients employed in S&E occupations, by field of degree, type of employer, and primary work activity: 1990

Field of degree	Primary work activity						
	Teaching	Production/ inspection	Reporting/ stat work/ computing	Sales	Profes- sional services	Other	No report
Environ science.....	S	500	100	S	S	700	S
Business and Industry.....	S	200	100	S	S	400	S
Industry.....	S	200	100	S	S	400	S
Educ inst, total....	S	S	S	S	S	S	S
4-yr college/univ.	S	S	S	S	S	S	S
Other.....	S	S	S	S	S	S	S
Federal Government..	S	100	100	S	S	S	S
State/local govt....	S	100	S	S	S	300	S
Other.....	S	100	S	S	S	300	S
Life sciences.....	2,400	4,200	1,100	1,000	700	2,100	S
Business and Industry.....	S	3,500	800	1,000	200	1,400	S
Industry.....	S	3,100	800	1,000	200	1,200	S
Self employed.....	S	400	S	S	S	200	S
Educ inst, total....	2,100	S	S	S	S	S	S
4-yr college/univ.	S	S	S	S	S	S	S
Other.....	2,100	S	S	S	S	S	S
Nonprofit orgs.....	S	300	S	S	S	S	S
Federal Government..	S	100	S	S	S	300	S
State/local govt....	S	100	100	S	S	300	S
Other.....	200	200	300	S	400	S	S
Psychology.....	1,100	1,200	2,200	500	1,100	1,300	S
Business and Industry.....	200	400	1,300	500	S	200	S
Industry.....	200	400	1,300	500	S	200	S
Self employed.....	S	S	100	S	S	S	S
Educ inst, total....	S	200	S	S	S	S	S
Other.....	S	200	S	S	S	S	S
Nonprofit orgs.....	400	S	200	S	800	1,100	S
Federal Government..	S	S	S	S	S	S	S
State/local govt....	200	S	600	S	S	S	S
Other.....	200	500	S	S	200	S	S
Social sciences.....	2,300	1,200	3,500	1,300	S	2,100	S
Business and Industry.....	400	800	2,200	1,000	S	900	S
Industry.....	400	800	2,200	1,000	S	700	S
Self employed.....	S	S	S	S	S	200	S
Educ inst, total....	1,000	S	500	200	S	S	S
4-yr college/univ.	S	S	500	S	S	S	S
Other.....	1,000	S	S	200	S	S	S
Nonprofit orgs.....	200	S	200	S	S	200	S
Federal Government..	300	200	500	200	S	S	S
State/local govt....	S	200	200	S	S	400	S
Other.....	300	S	S	S	S	600	S
Total engineering.....	600	15,100	5,600	1,400	S	7,200	300
Business and Industry.....	200	11,900	4,400	1,300	S	5,600	300
Industry.....	200	11,900	4,200	1,300	S	5,500	300
Self employed.....	S	S	100	S	S	100	S
Educ inst, total....	200	200	S	S	S	S	S
4-yr college/univ.	S	200	S	S	S	S	S
Other.....	100	S	S	S	S	S	S
Nonprofit orgs.....	S	200	S	S	S	200	S
Federal Government..	100	1,200	400	S	S	300	S
State/local govt....	S	900	600	100	S	400	S
Other.....	200	700	200	S	S	700	S
No report.....	S	S	S	S	S	S	S

KEY: S = Data suppressed for statistical reasons

NOTES: Because of rounding, components may not add to totals.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table 8-11. 1988 science and engineering master's-degree recipients, by field of degree, sex, and graduate school status: 1990

Field of degree and sex	Total	Graduate school status				
		Full-time student	Part-time student	Nonstudent	Other	No report
Total, all fields	66,100	14,800	5,400	45,200	600	S
Men	46,600	10,900	3,800	31,400	400	S
Women	19,500	4,000	1,500	13,800	200	S
Total sciences	45,200	11,100	3,500	30,300	200	S
Men	28,000	7,600	2,000	18,200	100	S
Women	17,200	3,500	1,400	12,100	200	S
Physical sciences	4,600	1,800	300	2,500	100	S
Men	3,600	1,500	200	1,900	S	S
Women	1,000	300	100	600	S	S
Chemistry	1,800	600	100	1,100	100	S
Men	1,200	400	100	700	S	S
Women	700	200	100	400	S	S
Physics/astronomy	2,100	1,100	100	900	S	S
Men	1,900	1,000	100	800	S	S
Women	200	100	S	S	S	S
Other phys sciences	700	100	S	500	S	S
Men	600	100	S	400	S	S
Women	200	S	S	100	S	S
Math/statistics	5,500	800	400	4,200	S	S
Men	3,200	600	300	2,300	S	S
Women	2,300	200	200	1,900	S	S
Computer science	10,800	1,300	700	8,900	S	S
Men	8,000	1,000	500	6,500	S	S
Women	2,800	300	200	2,400	S	S
Environ science	2,700	700	100	1,900	S	S
Men	2,000	500	100	1,400	S	S
Women	700	200	S	500	S	S
Life sciences	9,600	3,700	800	5,000	S	S
Men	5,200	2,500	300	2,400	S	S
Women	4,500	1,200	500	2,700	S	S
Biology	6,000	2,500	500	3,000	S	S
Men	2,500	1,500	100	900	S	S
Women	3,500	900	400	2,100	S	S
Agr science	3,600	1,200	300	2,000	S	S
Men	2,600	900	200	1,500	S	S
Women	1,000	300	100	500	S	S
Psychology	3,000	700	500	1,800	S	S
Men	1,100	300	300	400	S	S
Women	1,900	400	200	1,300	S	S
Social sciences	9,000	2,200	700	6,000	100	S
Men	5,000	1,300	400	3,200	S	S
Women	3,900	900	300	2,800	S	S
Economics	2,200	500	100	1,500	S	S
Men	1,700	500	100	1,100	S	S
Women	500	100	S	400	S	S
Socio/anthro	1,300	400	200	700	S	S
Men	700	300	100	300	S	S
Women	700	100	200	400	S	S
Other soc sciences	5,500	1,300	400	3,800	S	S
Men	2,700	600	300	1,800	S	S
Women	2,800	700	100	1,900	S	S

See explanatory information and SOURCE at end of table.

Table B-11. 1988 science and engineering master's-degree recipients, by field of degree, sex, and graduate school status: 1990

Field of degree and sex	Total	Graduate school status				
		Full-time student	Part-time student	Nonstudent	Other	No report
Total engineering	20,900	3,700	1,900	14,900	300	S
Men	18,600	3,200	1,800	13,200	300	S
Women	2,300	500	100	1,700	S	S
Aero/astro	800	100	S	600	S	S
Men	700	100	S	600	S	S
Women	100	S	S	S	S	S
Chemical	1,100	300	100	700	S	S
Men	900	200	100	600	S	S
Women	200	100	S	100	S	S
Civil	2,200	200	200	1,700	S	S
Men	1,900	200	200	1,500	S	S
Women	300	S	S	300	S	S
Elect/electron	6,600	1,300	700	4,300	300	S
Men	6,200	1,200	700	4,100	300	S
Women	300	100	S	200	S	S
Industrial	1,400	100	100	1,200	S	S
Men	1,200	100	100	1,000	S	S
Women	200	S	S	200	S	S
Materials	900	300	S	500	S	S
Men	600	300	S	400	S	S
Women	200	100	S	200	S	S
Mechanical	4,200	700	500	3,000	S	S
Men	3,800	600	500	2,700	S	S
Women	400	100	S	300	S	S
Mining	200	S	S	200	S	S
Men	200	S	S	100	S	S
Women	100	S	S	S	S	S
Nuclear	300	200	S	100	S	S
Men	300	200	S	100	S	S
Women	S	S	S	S	S	S
Petroleum	200	S	S	200	S	S
Men	200	S	S	100	S	S
Women	S	S	S	S	S	S
Other engineering	3,100	500	300	2,300	S	S
Men	2,500	400	200	1,900	S	S
Women	500	100	100	400	S	S

KEY: S = Data suppressed for statistical reasons

NOTES: Because of rounding, components may not add to totals.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table 8-12. 1988 science and engineering (S&E) master's-degree recipients, by field of degree, employment status, and sex: 1990

Field of degree	Total population			Total employed			Employed in S&E occupation		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Total, all fields	66,200	46,600	19,500	58,500	41,700	16,700	51,900	37,600	14,300
Total sciences	45,300	28,000	17,200	39,700	25,000	14,600	33,500	21,100	12,300
Physical sciences	4,600	3,600	1,000	4,000	3,200	900	3,700	2,900	800
Chemistry	1,800	1,200	700	1,600	1,000	600	1,500	900	600
Physics/astronomy	2,100	1,900	200	1,800	1,600	100	1,700	1,500	100
Other phys sciences	700	600	200	700	500	100	600	400	100
Math/statistics	5,500	3,200	2,300	5,200	2,900	2,200	4,500	2,700	1,800
Computer science	10,900	8,000	2,800	10,300	7,600	2,600	9,100	6,600	2,500
Environ science	2,700	2,000	700	2,400	1,800	600	2,400	1,900	500
Life sciences	9,600	5,200	4,500	7,500	3,900	3,700	7,300	3,900	3,400
Biology	6,000	2,500	3,500	4,500	1,600	2,900	4,500	2,000	2,600
Agr science	3,600	2,600	1,000	3,000	2,200	800	2,700	1,900	800
Psychology	3,000	1,100	1,900	2,800	900	1,800	1,900	600	1,300
Social sciences	9,000	5,000	3,900	7,600	4,600	3,000	4,600	2,600	2,000
Economics	2,200	1,700	500	2,100	1,700	400	800	600	200
Socio/anthro	1,300	700	700	1,100	500	600	600	300	300
Other soc sciences	5,500	2,700	2,800	4,500	2,500	2,000	3,100	1,700	1,500
Total engineering	20,900	18,600	2,300	18,700	16,700	2,000	18,400	16,400	2,000
Aero/astro	800	700	100	700	700	$	600	600	100
Chemical	1,100	900	200	1,000	800	100	1,000	800	200
Civil	2,200	1,900	300	2,000	1,800	300	2,000	1,700	300
Elect/electron	6,600	6,200	300	5,800	5,500	300	6,100	5,800	300
Industrial	1,400	1,200	200	1,300	1,100	200	900	800	200
Materials	900	600	200	700	500	200	800	600	200
Mechanical	4,200	3,800	400	3,900	3,600	300	3,700	3,400	300
Mining	200	200	100	200	200	100	200	200	$
Nuclear	300	300	$	200	100	$	300	300	$
Petroleum	200	200	$	200	200	$	200	200	$
Other engineering	3,100	2,500	500	2,800	2,400	500	2,700	2,300	400

See explanatory information and SOURCE at end of table.

Table B-12. 1988 science and engineering (S&E) master's-degree recipients, by field of degree, employment status, and sex: 1990

Field of degree	Unemployed			Outside labor force		
	Total	Men	Women	Total	Men	Women
Total, all fields.....	1,200	800	400	6,500	4,000	2,500
Total sciences.....	700	400	400	4,800	2,600	2,200
Physical sciences.....	100	S	S	500	400	100
Chemistry.....	S	S	S	200	100	100
Physics/astronomy.....	S	S	S	300	300	S
Other phys sciences...	S	S	S	S	S	S
Math/statistics.....	S	S	S	300	200	100
Computer science.....	200	100	100	500	300	200
Environ science.....	S	S	S	300	100	100
Life sciences.....	100	100	100	2,000	1,200	700
Biology.....	100	S	100	1,400	900	500
Agr science.....	100	100	S	500	300	200
Psychology.....	100	S	100	100	100	S
Social sciences.....	100	100	100	1,200	300	900
Economics.....	S	S	S	100	S	100
Socio/anthro.....	S	S	S	300	200	100
Other soc sciences....	100	100	100	800	200	700
Total engineering.....	500	500	S	1,700	1,400	300
Aero/astro.....	S	S	S	100	100	S
Chemical.....	S	S	S	100	100	100
Civil.....	S	S	S	100	100	S
Elect/electron.....	200	200	S	600	600	S
Industrial.....	100	100	S	100	100	S
Materials.....	100	100	S	100	100	S
Mechanical.....	S	S	S	200	100	100
Mining.....	S	S	S	S	S	S
Nuclear.....	S	S	S	100	100	S
Petroleum.....	S	S	S	S	S	S
Other engineering.....	S	S	S	200	200	100

KEY: S = Data suppressed for statistical reasons

NOTES: Because of rounding, components may not add to totals.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-13. 1988 science and engineering (S&E) master's-degree recipients, by field of degree, employment status, and racial/ethnic group: 1990

Field of degree	Total population						Total employed					
	Total	White	Black	Asian	Native American	Hispanic 1/	Total	White	Black	Asian	Native American	Hispanic 1/
Total, all fields	66,200	49,000	2,200	7,800	300	2,000	58,500	43,800	2,000	6,300	300	1,900
Total sciences	45,300	34,500	1,600	4,100	300	1,200	39,700	30,500	1,400	3,300	300	1,100
Physical sciences	4,600	3,700	100	500	S	100	4,000	3,300	100	400	S	100
Chemistry	1,800	1,500	S	200	S	S	1,600	1,300	S	200	S	S
Physics/astronomy	2,100	1,700	S	200	S	100	1,800	1,500	S	100	S	100
Other phys sciences	700	600	S	100	S	S	700	600	S	S	S	S
Math/statistics	5,500	4,400	200	700	S	200	5,200	4,300	100	500	S	100
Computer science	10,900	7,400	400	1,900	100	200	10,300	7,100	400	1,600	100	200
Environ science	2,700	2,400	S	100	S	100	2,400	2,100	S	100	S	100
Life sciences	9,600	7,100	500	400	100	300	7,500	5,400	400	400	100	300
Biology	6,000	4,300	400	200	100	200	4,500	3,100	400	200	100	200
Agr science	3,600	2,800	100	200	S	200	3,000	2,300	100	200	S	200
Psychology	3,000	2,600	100	100	S	S	2,800	2,400	S	100	S	S
Social sciences	9,000	6,900	300	500	100	500	7,600	5,800	300	400	100	400
Economics	2,200	1,600	S	200	S	S	2,100	1,600	S	100	S	S
Socio/anthro	1,300	1,200	S	S	S	S	1,100	900	S	S	S	S
Other soc sciences	5,500	4,200	300	300	S	400	4,500	3,300	300	200	S	300
Total engineering	20,900	14,400	700	3,700	S	800	18,700	13,400	600	3,000	S	700
Aero/astro	800	700	S	S	S	S	700	600	S	S	S	S
Chemical	1,100	800	S	200	S	S	1,000	700	S	200	S	S
Civil	2,200	1,500	S	400	S	100	2,000	1,500	S	400	S	100
Elect/electron	6,600	4,300	300	1,300	S	200	5,800	3,900	300	1,000	S	200
Industrial	1,400	1,000	100	200	S	100	1,300	1,000	S	200	S	100
Materials	900	500	S	300	S	S	700	400	S	200	S	S
Mechanical	4,200	2,800	100	800	S	200	3,900	2,700	100	600	S	200
Mining	200	200	S	S	S	S	200	200	S	S	S	S
Nuclear	300	100	S	S	S	S	200	100	S	S	S	S
Petroleum	200	200	S	S	S	S	200	200	S	S	S	S
Other engineering	3,100	2,400	S	400	S	100	2,800	2,200	S	300	S	100

Field of degree	Employed in S&E occupation						Unemployed					
	Total	White	Black	Asian	Native American	Hispanic 1/	Total	White	Black	Asian	Native American	Hispanic 1/
Total, all fields	51,900	39,000	1,400	6,000	200	1,400	1,200	800	100	200	S	100
Total sciences	33,500	25,900	900	3,200	200	800	700	400	S	200	S	100
Physical sciences	3,700	3,100	100	300	S	100	100	S	S	S	S	S
Chemistry	1,500	1,200	S	200	S	S	S	S	S	S	S	S
Physics/astronomy	1,700	1,400	S	100	S	100	S	S	S	S	S	S
Other phys sciences	600	400	S	S	S	S	S	S	S	S	S	S
Math/statistics	4,500	3,600	100	400	S	100	S	S	S	S	S	S
Computer science	9,100	6,100	400	1,600	100	100	200	100	S	100	S	S
Environ science	2,400	2,100	S	100	S	100	S	S	S	S	S	S
Life sciences	7,300	5,700	200	300	100	300	100	100	S	S	S	S
Biology	4,500	3,600	100	200	100	100	100	100	S	S	S	S
Agr science	2,700	2,100	100	200	S	200	100	100	S	S	S	S
Psychology	1,900	1,800	S	S	S	S	100	100	S	S	S	S
Social sciences	4,600	3,500	100	300	S	200	100	S	S	S	S	100
Economics	800	600	S	100	S	S	S	S	S	S	S	S
Socio/anthro	600	600	S	S	S	S	S	S	S	S	S	S
Other soc sciences	3,100	2,300	100	200	S	100	100	S	S	S	S	100
Total engineering	18,400	13,000	500	2,800	S	700	500	400	100	S	S	S
Aero/astro	600	500	S	S	S	S	S	S	S	S	S	S
Chemical	1,000	700	S	200	S	S	S	S	S	S	S	S
Civil	2,000	1,400	S	400	S	100	S	S	S	S	S	S
Elect/electron	6,100	4,100	300	1,000	S	200	200	200	S	S	S	S
Industrial	900	700	100	100	S	100	100	S	100	S	S	S
Materials	800	500	S	200	S	S	100	100	S	S	S	S
Mechanical	3,700	2,600	100	600	S	200	S	S	S	S	S	S
Mining	200	200	S	S	S	S	S	S	S	S	S	S
Nuclear	300	100	S	S	S	S	S	S	S	S	S	S
Petroleum	200	100	S	S	S	S	S	S	S	S	S	S
Other engineering	2,700	2,100	S	300	S	100	S	S	S	S	S	S

See explanatory information and SOURCE at end of table.

Table B-13. 1988 science and engineering (S&E) master's-degree recipients, by field of degree, employment status, and racial/ethnic group: 1990

Field of degree	Outside labor force					
	Total	White	Black	Asian	Native American	Hispanic 1/
Total, all fields	6,500	4,300	100	1,300	S	S
Total sciences	4,800	3,600	100	600	S	S
Physical sciences	500	400	S	100	S	S
Chemistry	200	200	S	S	S	S
Physics/astronomy	300	200	S	100	S	S
Other phys sciences	S	S	S	S	S	S
Math/statistics	300	100	S	200	S	S
Computer science	500	300	S	200	S	S
Environ science	300	200	S	S	S	S
Life sciences	2,000	1,600	S	100	S	S
Biology	1,400	1,200	S	S	S	S
Agr science	500	400	S	S	S	S
Psychology	100	100	S	S	S	S
Social sciences	1,200	1,000	S	100	S	S
Economics	100	S	S	S	S	S
Socio/anthro	300	200	S	S	S	S
Other soc sciences	800	800	S	S	S	S
Total engineering	1,700	700	S	700	S	S
Aero/astro	100	S	S	S	S	S
Chemical	100	100	S	S	S	S
Civil	100	S	S	S	S	S
Elect/electron	600	200	S	300	S	S
Industrial	100	S	S	S	S	S
Materials	100	100	S	S	S	S
Mechanical	200	S	S	200	S	S
Mining	S	S	S	S	S	S
Nuclear	100	S	S	S	S	S
Petroleum	S	S	S	S	S	S
Other engineering	200	200	S	S	S	S

1/ Includes members of all racial groups

KEY: S = Data suppressed for statistical reasons

NOTES: Components will not add to totals because (a) racial and ethnic categories are not mutually exclusive, (b) total includes "other" and "no report," and (c) both components and totals have been rounded.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-14. 1988 science and engineering (S&E) master's-degree recipients, by field of degree, employment status, and sex: 1990

Field of degree	Total population			Total employed			Employed in S&E occupation		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Total, all fields	51,300	35,700	15,500	48,800	34,700	14,000	39,800	28,700	11,000
Total sciences	34,100	20,400	13,700	32,300	19,900	12,300	24,600	15,200	9,400
Physical sciences	2,800	2,100	700	2,700	2,100	600	2,400	1,900	600
Chemistry	1,300	700	500	1,200	700	500	1,100	600	400
Physics/astronomy	1,000	900	S	1,000	900	S	900	900	S
Other phys sciences	600	500	100	600	500	100	500	400	100
Math/statistics	4,700	2,600	2,100	4,600	2,600	2,000	3,800	2,200	1,600
Computer science	9,600	7,000	2,600	9,300	6,900	2,400	8,000	5,800	2,200
Environ science	2,000	1,500	500	2,000	1,500	500	1,900	1,400	400
Life sciences	5,900	2,700	3,200	5,600	2,600	3,000	4,500	1,900	2,600
Biology	3,500	1,000	2,500	3,400	1,000	2,400	2,800	700	2,100
Agr science	2,400	1,700	700	2,200	1,600	600	1,700	1,200	500
Psychology	2,300	700	1,500	2,100	700	1,400	1,300	300	1,000
Social sciences	6,800	3,700	3,100	5,900	3,600	2,300	2,600	1,600	1,000
Economics	1,600	1,200	400	1,600	1,200	400	400	200	200
Socio/anthro	1,000	400	600	900	400	500	400	100	300
Other soc sciences	4,200	2,100	2,100	3,400	2,000	1,400	1,800	1,300	500
Total engineering	17,200	15,300	1,900	16,500	14,800	1,800	15,100	13,500	1,600
Aero/astro	700	600	S	600	600	S	500	500	S
Chemical	800	700	100	800	700	100	800	700	100
Civil	1,900	1,700	300	1,900	1,600	300	1,800	1,600	300
Elect/electron	5,300	5,000	200	5,100	4,800	200	4,800	4,500	200
Industrial	1,300	1,100	200	1,200	1,000	200	800	600	200
Materials	500	400	200	500	300	200	500	300	100
Mechanical	3,500	3,200	300	3,500	3,200	300	3,300	3,100	200
Mining	200	200	S	200	100	S	200	100	S
Nuclear	100	100	S	100	100	S	100	100	S
Petroleum	200	200	S	200	200	S	200	200	S
Other engineering	2,600	2,200	500	2,500	2,100	400	2,300	1,900	400

See explanatory information and SOURCE at end of table.

Table B-14. 1988 science and engineering master's-degree recipients, by field of degree, employment status, and sex: 1990

Field of degree	Unemployed			Outside labor force		
	Total	Men	Women	Total	Men	Women
Total, all fields	800	500	400	1,600	500	1,100
Total sciences	600	200	400	1,200	200	1,100
Physical sciences	S	S	S	100	S	S
Chemistry	S	S	S	S	S	S
Physics/astronomy	S	S	S	S	S	S
Other phys sciences	S	S	S	S	S	S
Math/statistics	S	S	S	100	S	100
Computer science	200	100	100	100	S	100
Environ science	S	S	S	S	S	S
Life sciences	100	100	100	200	S	200
Biology	100	S	100	100	S	100
Agr science	100	100	S	100	S	100
Psychology	100	S	100	S	S	S
Social sciences	100	S	100	800	100	700
Economics	S	S	S	S	S	S
Socio/anthro	S	S	S	100	S	100
Other soc sciences	100	S	100	700	100	600
Total engineering	300	200	S	400	300	100
Aero/astro	S	S	S	S	S	S
Chemical	S	S	S	S	S	S
Civil	S	S	S	S	S	S
Elect/electron	100	100	S	200	200	S
Industrial	100	100	S	S	S	S
Materials	S	S	S	S	S	S
Mechanical	S	S	S	S	S	S
Mining	S	S	S	S	S	S
Nuclear	S	S	S	S	S	S
Petroleum	S	S	S	S	S	S
Other engineering	S	S	S	100	100	S

KEY: S = Data suppressed for statistical reasons

NOTES: Because of rounding, components may not add to totals.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-15. 1988 science and engineering (S&E) master's degree-recipients, by field of degree, employment status, and racial/ethnic group: 1990

Field of degree	Total population					
	Total	White	Black	Asian	Native American	Hispanic 1/
Total, all fields.....	51,300	39,200	1,600	5,500	100	1,500
Total sciences.....	34,100	26,700	900	3,000	100	900
Physical sciences.....	2,800	2,400	100	200	S	S
Chemistry.....	1,300	1,000	S	100	S	S
Physics/astronomy.....	1,000	900	S	100	S	S
Other phys sciences...	600	500	S	S	S	S
Math/statistics.....	4,700	3,900	100	400	S	100
Computer science.....	9,600	6,700	300	1,500	S	200
Environ science.....	2,000	1,800	S	S	S	S
Life sciences.....	5,900	4,800	100	300	S	200
Biology.....	3,500	3,000	100	200	S	100
Agr science.....	2,400	1,800	100	200	S	100
Psychology.....	2,300	2,000	S	100	S	S
Social sciences.....	6,800	5,100	300	400	100	400
Economics.....	1,600	1,200	S	100	S	S
Socio/anthro.....	1,000	800	S	S	S	S
Other soc sciences....	4,200	3,100	200	200	S	300
Total engineering.....	17,200	12,500	700	2,500	S	600
Aero/astro.....	700	600	S	S	S	S
Chemical.....	800	600	S	100	S	S
Civil.....	1,900	1,400	S	300	S	100
Elect/electron.....	5,300	3,500	300	1,000	S	100
Industrial.....	1,300	1,000	100	100	S	100
Materials.....	500	300	S	200	S	S
Mechanical.....	3,500	2,500	100	400	S	100
Mining.....	200	200	S	S	S	S
Nuclear.....	100	100	S	S	S	S
Petroleum.....	200	200	S	S	S	S
Other engineering.....	2,600	2,100	S	200	S	100

Field of degree	Total employed					
	Total	White	Black	Asian	Native American	Hispanic 1/
Total, all fields.....	48,800	37,400	1,500	5,100	100	1,500
Total sciences.....	32,300	25,200	900	2,700	100	900
Physical sciences.....	2,700	2,400	100	200	S	S
Chemistry.....	1,200	900	S	100	S	S
Physics/astronomy.....	1,000	900	S	100	S	S
Other phys sciences...	600	500	S	S	S	S
Math/statistics.....	4,600	3,800	100	400	S	100
Computer science.....	9,300	6,500	300	1,400	S	200
Environ science.....	2,000	1,800	S	S	S	S
Life sciences.....	5,600	4,500	100	300	S	200
Biology.....	3,400	2,800	S	200	S	100
Agr science.....	2,200	1,700	100	200	S	100
Psychology.....	2,100	1,900	S	100	S	S
Social sciences.....	5,900	4,400	300	300	100	400
Economics.....	1,600	1,200	S	100	S	S
Socio/anthro.....	900	800	S	S	S	S
Other soc sciences....	3,400	2,500	200	100	S	300
Total engineering.....	16,500	12,100	600	2,400	S	600
Aero/astro.....	600	600	S	S	S	S
Chemical.....	800	600	S	100	S	S
Civil.....	1,900	1,400	S	300	S	100
Elect/electron.....	5,100	3,400	300	1,000	S	100
Industrial.....	1,200	1,000	S	100	S	100
Materials.....	500	300	S	200	S	S
Mechanical.....	3,500	2,500	100	400	S	100
Mining.....	200	200	S	S	S	S
Nuclear.....	100	100	S	S	S	S
Petroleum.....	200	200	S	S	S	S
Other engineering.....	2,500	2,100	S	200	S	100

See explanatory information and SOURCE at end of table.

Table B-15. 1988 science and engineering (S&E) master's degree-recipients, by field of degree, employment status, and racial/ethnic group: 1990

Field of degree	Employed in S&E occupation					
	Total	White	Black	Asian	Native American	Hispanic 1/
Total, all fields	39,800	30,200	1,100	4,600	100	1,000
Total sciences	24,600	19,100	700	2,400	S	500
Physical sciences	2,400	2,100	S	200	S	S
Chemistry	1,100	900	S	100	S	S
Physics/astronomy	900	800	S	100	S	S
Other phys sciences	500	400	S	S	S	S
Math/statistics	3,800	3,100	100	300	S	100
Computer science	8,000	5,400	300	1,200	S	100
Environ science	1,900	1,700	S	S	S	S
Life sciences	4,500	3,800	100	300	S	100
Biology	2,800	2,500	S	200	S	S
Agr science	1,700	1,300	100	200	S	100
Psychology	1,300	1,300	S	S	S	S
Social sciences	2,600	1,600	100	300	S	200
Economics	400	200	S	100	S	S
Socio/anthro	400	400	S	S	S	S
Other soc sciences	1,800	1,000	100	100	S	100
Total engineering	15,100	11,100	500	2,200	S	500
Aero/astro	500	400	S	S	S	S
Chemical	800	500	S	100	S	S
Civil	1,800	1,400	S	300	S	100
Elect/electron	4,800	3,200	300	900	S	100
Industrial	800	700	S	100	S	100
Materials	500	300	S	200	S	S
Mechanical	3,300	2,400	100	400	S	100
Mining	200	200	S	S	S	S
Nuclear	100	100	S	S	S	S
Petroleum	200	100	S	S	S	S
Other engineering	2,300	1,900	S	200	S	100

Field of degree	Unemployed					
	Total	White	Black	Asian	Native American	Hispanic 1/
Total, all fields	800	600	100	100	S	S
Total sciences	600	400	S	100	S	S
Physical sciences	S	S	S	S	S	S
Chemistry	S	S	S	S	S	S
Physics/astronomy	S	S	S	S	S	S
Other phys sciences	S	S	S	S	S	S
Math/statistics	S	S	S	S	S	S
Computer science	200	100	S	100	S	S
Environ science	S	S	S	S	S	S
Life sciences	100	100	S	S	S	S
Biology	100	100	S	S	S	S
Agr science	100	100	S	S	S	S
Psychology	100	100	S	S	S	S
Social sciences	100	S	S	S	S	S
Economics	S	S	S	S	S	S
Socio/anthro	S	S	S	S	S	S
Other soc sciences	100	S	S	S	S	S
Total engineering	300	200	100	S	S	S
Aero/astro	S	S	S	S	S	S
Chemical	S	S	S	S	S	S
Civil	S	S	S	S	S	S
Elect/electron	100	100	S	S	S	S
Industrial	100	S	100	S	S	S
Materials	S	S	S	S	S	S
Mechanical	S	S	S	S	S	S
Mining	S	S	S	S	S	S
Nuclear	S	S	S	S	S	S
Petroleum	S	S	S	S	S	S
Other engineering	S	S	S	S	S	S

See explanatory information and SOURCE at end of table.

Table B-15. 1988 science and engineering (S&E) master's degree-recipients, by field of degree, employment status, and racial/ethnic group: 1990

Field of degree	Outside labor force					
	Total	White	Black	Asian	Native American	Hispanic 1/
Total, all fields.....	1,600	1,300	S	200	S	S
Total sciences.....	1,200	1,100	S	100	S	S
Physical sciences.....	100	100	S	S	S	S
Chemistry.....	S	S	S	S	S	S
Physics/astronomy.....	S	S	S	S	S	S
Other phys sciences...	S	S	S	S	S	S
Math/statistics.....	100	S	S	100	S	S
Computer science.....	100	100	S	S	S	S
Environ science.....	S	S	S	S	S	S
Life sciences.....	200	200	S	S	S	S
Biology.....	100	100	S	S	S	S
Agr science.....	100	100	S	S	S	S
Psychology.....	S	S	S	S	S	S
Social sciences.....	800	700	S	S	S	S
Economics.....	S	S	S	S	S	S
Socio/anthro.....	100	100	S	S	S	S
Other soc sciences....	700	600	S	S	S	S
Total engineering.....	400	200	S	100	S	S
Aero/astro.....	S	S	S	S	S	S
Chemical.....	S	S	S	S	S	S
Civil.....	S	S	S	S	S	S
Elect/electron.....	200	100	S	S	S	S
Industrial.....	S	S	S	S	S	S
Materials.....	S	S	S	S	S	S
Mechanical.....	S	S	S	S	S	S
Mining.....	S	S	S	S	S	S
Nuclear.....	S	S	S	S	S	S
Petroleum.....	S	S	S	S	S	S
Other engineering.....	100	100	S	S	S	S

1/ Includes members of all racial groups

KEY: S = Data suppressed for statistical reasons

NOTES: Components will not add to totals because (a) racial and ethnic categories are not mutually exclusive, (b) total includes "other" and "no report," and (c) both components and totals have been rounded.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-16. 1988 science and engineering master's-degree recipients, by field of degree, sex, and type of employer: 1990

Field of degree and sex	Total employed	Type of employer										
		Business and industry			Educational institutions			Non-profit orgs	Federal Govern-ment	State local govern-	Other	No report
		Total	Industry	Self-employed	Total	4-yr college univ	Other					
Total, all fields	48,700	29,500	28,800	700	7,400	3,500	4,000	1,500	4,100	2,400	3,700	100
Men	34,700	23,500	23,000	500	4,000	2,000	2,000	600	2,400	1,400	2,900	100
Women	14,000	5,900	5,800	100	3,500	1,500	2,000	900	1,800	1,000	800	100
Total sciences	32,200	16,200	15,700	500	6,800	3,000	3,900	1,400	3,200	1,900	2,700	S
Men	19,900	11,500	11,100	400	3,400	1,500	1,900	400	1,600	1,000	2,000	S
Women	12,300	4,700	4,600	100	3,400	1,400	2,000	900	1,500	900	700	S
Physical sciences	2,700	1,600	1,600	S	700	200	400	100	200	S	200	S
Men	2,100	1,200	1,200	S	500	200	300	100	200	S	200	S
Women	600	400	400	S	200	100	100	S	S	S	S	S
Chemistry	1,200	800	800	S	200	100	100	S	100	S	S	S
Men	700	500	500	S	200	S	100	S	S	S	S	S
Women	500	400	400	S	100	100	S	S	S	S	S	S
Physics/astronomy	1,000	600	600	S	100	100	S	S	100	S	100	S
Men	900	600	600	S	100	100	S	S	100	S	100	S
Women	S	S	S	S	S	S	S	S	S	S	S	S
Other phys sciences	600	200	200	S	300	S	200	S	S	S	S	S
Men	500	200	200	S	200	S	200	S	S	S	S	S
Women	100	S	S	S	100	S	100	S	S	S	S	S
Math/statistics	4,600	1,700	1,700	S	2,200	500	1,600	S	S	100	400	S
Men	2,600	1,100	1,100	S	900	300	600	S	S	100	300	S
Women	2,000	600	600	S	1,200	300	1,000	S	S	S	100	S
Computer science	9,300	7,100	7,000	100	600	300	300	100	500	100	900	S
Men	6,900	5,300	5,100	100	500	200	300	S	300	S	800	S
Women	2,400	1,800	1,800	S	200	100	100	100	200	100	100	S
Environ science	2,000	1,200	1,100	100	200	100	S	S	300	200	100	S
Men	1,500	1,000	1,000	S	100	100	S	S	200	100	100	S
Women	500	200	200	S	100	100	S	S	100	100	S	S
Life sciences	5,600	1,600	1,500	100	1,900	1,000	900	300	900	500	500	S
Men	2,600	1,000	1,000	100	900	600	300	S	200	300	200	S
Women	3,000	500	500	S	1,000	400	600	300	700	300	200	S
Biology	3,400	700	700	S	1,000	200	800	300	700	400	400	S
Men	1,000	300	300	S	400	100	300	S	100	100	200	S
Women	2,400	400	400	S	600	100	500	300	600	300	200	S
Agr science	2,200	900	800	100	900	800	100	100	200	100	100	S
Men	1,600	800	700	100	500	500	S	S	100	100	100	S
Women	600	100	100	S	400	300	100	S	100	S	S	S
Psychology	2,100	600	600	S	400	200	200	600	100	200	300	S
Men	700	200	200	S	100	S	S	100	S	100	100	S
Women	1,400	400	400	S	300	100	100	400	100	100	200	S
Social sciences	5,900	2,400	2,200	200	1,000	600	300	200	1,100	900	400	S
Men	3,600	1,600	1,400	100	500	200	300	100	700	500	300	S
Women	2,300	800	800	100	500	400	S	100	400	400	100	S
Economics	1,600	1,300	1,300	S	100	100	S	S	S	200	S	S
Men	1,200	1,000	1,000	S	S	S	S	S	S	200	S	S
Women	400	300	300	S	S	S	S	S	S	S	S	S
Socio/anthro	900	200	100	100	200	200	S	S	100	200	100	S
Men	400	100	S	100	S	S	S	S	S	100	100	S
Women	500	100	100	100	200	200	S	S	100	100	S	S
Other soc sciences	3,400	900	800	100	700	400	300	200	1,000	500	200	S
Men	2,000	500	400	100	500	200	300	100	700	200	100	S
Women	1,400	400	400	S	200	200	S	100	300	300	100	S

See explanatory information and SOURCE at end of table.

Table B-16. 1988 science and engineering master's-degree recipients, by field of degree, sex, and type of employer: 1990

Field of degree and sex	Total employed	Type of employer										
		Business and industry			Educational institutions			Non-profit orgs	Federal Govern-ment	State/ local govern-ments	Other	No report
		Total	Industry	Self-employed	Total	4-yr college univ	Other					
Total engineering	16,500	13,300	13,100	100	600	500	100	200	1,000	500	900	100
Men	14,800	12,000	11,900	100	500	400	100	100	800	400	900	100
Women	1,800	1,300	1,200	S	100	100	S	S	200	100	S	S
Aero/astro	600	600	600	S	S	S	S	S	S	S	S	S
Men	600	500	500	S	S	S	S	S	S	S	S	S
Women	S	S	S	S	S	S	S	S	S	S	S	S
Chemical	800	700	700	S	100	100	S	S	S	S	S	S
Men	700	600	600	S	S	S	S	S	S	S	S	S
Women	100	100	100	S	S	S	S	S	S	S	S	S
Civil	1,900	1,200	1,200	S	100	100	S	S	200	200	100	S
Men	1,600	1,100	1,100	S	100	100	S	S	100	200	S	S
Women	300	100	100	S	S	S	S	S	S	100	S	S
Elect/electron	5,100	4,300	4,300	S	100	100	S	S	300	S	400	S
Men	4,800	4,000	4,000	S	100	100	S	S	300	S	400	S
Women	200	200	200	S	S	S	S	S	S	S	S	S
Industrial	1,200	900	900	S	S	S	S	S	100	S	100	S
Men	1,000	800	800	S	S	S	S	S	S	S	100	S
Women	200	100	100	S	S	S	S	S	S	S	S	S
Materials	500	400	400	S	S	S	S	S	S	S	S	S
Men	300	300	300	S	S	S	S	S	S	S	S	S
Women	200	100	100	S	S	S	S	S	S	S	S	S
Mechanical	3,500	3,000	2,900	S	100	100	S	100	200	100	S	S
Men	3,200	2,800	2,800	S	100	100	S	100	100	100	S	S
Women	300	200	200	S	S	S	S	S	100	S	S	S
Mining	200	100	100	S	S	S	S	S	S	S	S	S
Men	100	100	100	S	S	S	S	S	S	S	S	S
Women	S	S	S	S	S	S	S	S	S	S	S	S
Nuclear	100	100	100	S	S	S	S	S	S	S	S	S
Men	100	100	100	S	S	S	S	S	S	S	S	S
Women	S	S	S	S	S	S	S	S	S	S	S	S
Petroleum	200	200	200	S	S	S	S	S	S	S	S	S
Men	200	100	100	S	S	S	S	S	S	S	S	S
Women	S	S	S	S	S	S	S	S	S	S	S	S
Other engineering	2,500	1,800	1,800	100	200	100	100	S	200	100	300	S
Men	2,100	1,500	1,400	S	100	100	100	S	100	100	300	S
Women	400	300	300	S	S	S	S	S	100	S	S	S

KEY: S = Data suppressed for statistical reasons

NOTES: Because of rounding, components may not add to totals.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-17. 1986 science and engineering master's-degree recipients, by field of degree, sex, and primary work activity: 1990

Field of degree and sex	Total employed	Primary work activity						
		Research and development				Management/administration		
		Total	Basic	Applied	Develop-ment	Total	Of R&D	Of non-R&D
Total, all fields	48,700	16,500	1,600	4,100	10,800	8,300	2,600	5,700
Men	34,700	12,900	800	2,700	9,400	5,800	2,000	3,800
Women	14,000	3,600	800	1,400	1,400	2,600	600	1,900
Total sciences	32,200	8,200	1,400	2,800	4,100	6,100	1,700	4,400
Men	19,900	5,300	600	1,500	3,200	3,800	1,200	2,600
Women	12,300	2,900	800	1,300	800	2,300	500	1,700
Physical sciences	2,700	1,300	200	500	600	200	S	100
Men	2,100	1,000	200	400	400	100	S	100
Women	600	300	100	100	200	S	S	S
Chemistry	1,200	700	100	300	300	100	S	100
Men	700	400	S	200	100	100	S	100
Women	500	300	100	100	200	S	S	S
Physics/astronomy	1,000	500	100	100	300	S	S	S
Men	900	500	100	100	300	S	S	S
Women	S	S	S	S	S	S	S	S
Other phys sciences	600	100	S	100	S	100	S	S
Men	500	100	S	100	S	S	S	S
Women	100	S	S	S	S	S	S	S
Math/statistics	4,600	700	100	300	400	600	100	400
Men	2,600	500	100	200	300	400	100	300
Women	2,000	200	S	100	100	100	S	100
Computer science	9,300	2,600	S	300	2,300	1,700	700	1,000
Men	6,900	2,100	S	100	2,000	1,400	600	800
Women	2,400	500	S	200	300	300	100	200
Environ science	2,000	600	100	300	200	200	100	200
Men	1,500	500	100	200	100	100	S	100
Women	500	100	S	100	S	100	S	100
Life sciences	5,600	2,100	700	900	500	1,000	500	500
Men	2,600	800	100	300	300	500	300	200
Women	3,000	1,200	600	500	100	500	200	300
Biology	3,400	1,300	700	600	S	400	100	300
Men	1,000	300	100	200	S	100	S	100
Women	2,400	900	500	400	S	300	100	200
Agr science	2,200	800	S	300	400	600	400	200
Men	1,600	500	S	200	300	400	300	100
Women	600	300	S	100	100	100	100	100
Psychology	2,100	200	S	S	100	400	100	300
Men	700	100	S	S	S	200	S	200
Women	1,400	100	S	S	100	300	100	200
Social sciences	5,900	700	100	500	100	2,000	200	1,800
Men	3,600	300	100	300	S	1,100	100	900
Women	2,300	400	S	300	S	1,000	100	800
Economics	1,600	200	S	100	S	400	S	400
Men	1,200	100	S	100	S	400	S	400
Women	400	100	S	S	S	S	S	S
Socio/anthro	900	200	S	100	100	200	S	100
Men	400	S	S	S	S	100	S	100
Women	500	200	S	100	S	100	S	S
Other soc sciences	3,400	300	100	300	S	1,400	200	1,200
Men	2,000	200	100	200	S	600	100	400
Women	1,400	100	S	100	S	900	100	800

See explanatory information and SOURCE at end of table.

Table B-17. 1988 science and engineering master's-degree recipients, by field of degree, sex, and primary work activity: 1990

Field of degree and sex	Primary work activity						
	Teaching	Production/ inspection	Reporting/ stat work/ computing	Sales	Profes- sional services	Other	No report
Total, all fields	5,900	3,800	7,000	600	600	5,800	100
Men	3,200	3,200	4,800	500	200	4,100	S
Women	2,800	600	2,200	100	400	1,700	S
Total sciences	5,400	2,000	5,500	400	600	4,000	S
Men	2,700	1,500	3,500	400	200	2,600	S
Women	2,800	500	2,000	S	400	1,400	S
Physical sciences	500	400	200	S	S	200	S
Men	400	300	100	S	S	100	S
Women	200	S	100	S	S	S	S
Chemistry	200	100	100	S	S	100	S
Men	100	100	S	S	S	100	S
Women	100	S	100	S	S	S	S
Physics/astronomy	100	200	100	S	S	S	S
Men	100	200	100	S	S	S	S
Women	S	S	S	S	S	S	S
Other phys sciences	200	100	S	S	S	100	S
Men	200	100	S	S	S	100	S
Women	100	S	S	S	S	S	S
Math/statistics	2,000	200	800	S	S	300	S
Men	900	100	500	S	S	200	S
Women	1,100	100	300	S	S	100	S
Computer science	400	400	3,100	100	S	900	S
Men	300	300	2,100	100	S	600	S
Women	100	100	1,000	S	S	300	S
Environ science	100	300	300	S	S	500	S
Men	S	300	200	S	S	400	S
Women	S	S	100	S	S	100	S
Life sciences	1,200	300	300	S	100	600	S
Men	600	100	200	S	S	300	S
Women	600	200	100	S	S	300	S
Biology	900	300	100	S	S	300	S
Men	400	100	S	S	S	100	S
Women	500	200	100	S	S	300	S
Agr science	300	S	300	S	S	300	S
Men	200	S	200	S	S	200	S
Women	100	S	S	S	S	S	S
Psychology	400	S	100	S	500	300	S
Men	200	S	S	S	100	S	S
Women	300	S	100	S	400	300	S
Social sciences	900	300	500	200	S	1,200	S
Men	400	300	300	200	S	900	S
Women	500	S	200	S	S	300	S
Economics	100	300	200	100	S	300	S
Men	S	300	200	100	S	200	S
Women	100	S	S	S	S	200	S
Socio/anthro	100	S	100	100	S	200	S
Men	S	S	S	100	S	100	S
Women	100	S	100	S	S	100	S
Other soc sciences	600	100	200	100	S	700	S
Men	400	100	100	100	S	700	S
Women	200	S	100	S	S	100	S

See explanatory information and SOURCE at end of table.

Table B-17. 1988 science and engineering master's-degree recipients, by field of degree, sex, and primary work activity: 1990

Field of degree and sex	Total employed	Primary work activity						
		Research and development				Management/administration		
		Total	Basic	Applied	Develop-ment	Total	Of R&D	Of non-R&D
Total engineering	16,500	8,300	300	1,300	6,700	2,200	900	1,300
Men	14,800	7,600	200	1,200	6,200	1,900	800	1,100
Women	1,800	700	100	100	600	300	100	200
Aero/astro	600	300	S	100	300	200	100	100
Men	600	300	S	100	300	200	100	100
Women	S	S	S	S	S	S	S	S
Chemical	800	400	S	100	300	200	100	100
Men	700	400	S	100	200	200	100	100
Women	100	100	S	S	S	S	S	S
Civil	1,900	500	S	100	300	300	S	300
Men	1,600	400	S	100	300	300	S	300
Women	300	100	S	S	S	100	S	100
Elect/electron	5,100	3,200	S	300	2,800	400	300	100
Men	4,800	3,100	S	300	2,700	400	300	100
Women	200	100	S	S	100	S	S	S
Industrial	1,200	300	S	100	200	300	100	200
Men	1,000	200	S	100	100	200	S	200
Women	200	S	S	S	S	100	S	100
Materials	500	400	S	100	200	100	100	S
Men	300	200	S	100	100	100	100	S
Women	200	100	S	S	100	S	S	S
Mechanical	3,500	2,400	S	400	2,000	300	200	200
Men	3,200	2,200	S	400	1,800	300	200	100
Women	300	200	S	S	200	S	S	S
Mining	200	S	S	S	S	S	S	S
Men	100	S	S	S	S	S	S	S
Women	S	S	S	S	S	S	S	S
Nuclear	100	100	S	S	S	S	S	S
Men	100	S	S	S	S	S	S	S
Women	S	S	S	S	S	S	S	S
Petroleum	200	S	S	S	S	S	S	S
Men	200	S	S	S	S	S	S	S
Women	S	S	S	S	S	S	S	S
Other engineering	2,500	800	S	100	600	400	100	300
Men	2,100	700	S	100	600	300	100	300
Women	400	100	S	S	100	100	S	S

See explanatory information and SOURCE at end of table.

Table B-17. 1988 science and engineering master's-degree recipients, by field of degree, sex, and primary work activity: 1990

Field of degree and sex	Primary work activity						
	Teaching	Production/ inspection	Reporting/ stat work/ computing	Sales	Profes- sional services	Other	No report
Total engineering	500	1,900	1,500	200	S	1,800	100
Men	500	1,700	1,300	200	S	1,500	S
Women	S	100	200	100	S	300	S
Aero/astro	S	S	S	S	S	S	S
Men	S	S	S	S	S	S	S
Women	S	S	S	S	S	S	S
Chemical	S	100	S	S	S	100	S
Men	S	100	S	S	S	100	S
Women	S	S	S	S	S	S	S
Civil	100	300	100	S	S	500	S
Men	100	200	100	S	S	500	S
Women	S	S	S	S	S	S	S
Elect/electron	200	500	600	S	S	100	S
Men	200	500	500	S	S	100	S
Women	S	S	100	S	S	S	S
Industrial	S	200	100	100	S	200	S
Men	S	200	100	100	S	200	S
Women	S	100	S	S	S	S	S
Materials	S	S	S	S	S	S	S
Men	S	S	S	S	S	S	S
Women	S	S	S	S	S	S	S
Mechanical	S	300	200	S	S	200	S
Men	S	300	200	S	S	200	S
Women	S	S	S	S	S	S	S
Mining	S	S	S	S	S	S	S
Men	S	S	S	S	S	S	S
Women	S	S	S	S	S	S	S
Nuclear	S	S	S	S	S	S	S
Men	S	S	S	S	S	S	S
Women	S	S	S	S	S	S	S
Petroleum	S	100	S	S	S	S	S
Men	S	100	S	S	S	S	S
Women	S	S	S	S	S	S	S
Other engineering	100	300	300	S	S	500	S
Men	100	300	300	S	S	400	S
Women	S	S	100	S	S	200	S

KEY: S = Data suppressed for statistical reasons

NOTES: Because of rounding, components may not add to totals.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-18. 1988 science and engineering master's-degree recipients, by field of degree, type of employer, and primary work activity: 1990

Field of degree and type of employer	Total employed	Primary work activity						
		Research and development				Management/administration		
		Total	Basic	Applied	Develop-ment	Total	Of R&D	Of non-R&D
Total, all fields	48,800	16,500	1,600	4,100	10,800	8,300	2,600	5,700
Business and Industry	29,500	12,100	300	2,200	9,600	4,400	1,400	3,000
Industry	28,900	12,000	300	2,100	9,600	4,300	1,400	2,900
Self employed	700	100	S	100	S	100	S	100
Educ inst, total	7,400	1,300	600	500	200	600	400	200
4-yr college/univ.	3,500	1,200	500	400	200	500	400	100
Other	4,000	200	100	100	S	100	100	100
Nonprofit orgs	1,500	300	100	200	S	400	100	200
Federal Government	4,100	1,700	500	600	600	900	300	600
State/local govt	2,400	500	100	300	200	900	200	700
Other	3,700	600	100	300	200	1,200	300	900
No report	100	S	S	S	S	S	S	S
Total sciences	32,300	8,200	1,400	2,800	4,100	6,100	1,700	4,400
Business and Industry	16,300	5,100	200	1,400	3,600	2,700	700	2,000
Industry	15,700	5,000	200	1,300	3,500	2,600	700	1,900
Self employed	500	100	S	S	S	100	S	100
Educ inst, total	6,800	1,100	600	400	200	600	400	200
4-yr college/univ.	3,000	900	400	300	200	500	300	100
Other	3,900	200	100	100	S	100	100	100
Nonprofit orgs	1,400	200	S	100	S	400	100	200
Federal Government	3,200	1,100	400	500	200	600	100	500
State/local govt	1,900	300	100	200	S	800	200	600
Other	2,700	400	100	200	100	1,000	200	800
No report	S	S	S	S	S	S	S	S
Physical sciences	2,700	1,300	200	500	600	200	S	100
Business and Industry	1,600	1,000	100	400	500	100	S	100
Industry	1,600	1,000	100	400	500	100	S	100
Self employed	S	S	S	S	S	S	S	S
Educ inst, total	700	100	100	S	S	S	S	S
4-yr college/univ.	200	100	100	S	S	S	S	S
Other	400	S	S	S	S	S	S	S
Nonprofit orgs	100	S	S	S	S	S	S	S
Federal Government	200	100	S	S	S	S	S	S
State/local govt	S	S	S	S	S	S	S	S
Other	200	100	S	S	S	S	S	S
Math/statistics	4,600	700	100	300	400	600	100	400
Business and Industry	1,700	400	S	200	200	300	100	200
Industry	1,700	400	S	200	200	300	100	200
Self employed	S	S	S	S	S	S	S	S
Educ inst, total	2,200	100	100	S	S	S	S	S
4-yr college/univ.	500	100	100	S	S	S	S	S
Other	1,600	S	S	S	S	S	S	S
Nonprofit orgs.	S	S	S	S	S	S	S	S
Federal Government	S	S	S	S	S	S	S	S
State/local govt	100	S	S	S	S	S	S	S
Other	400	100	S	S	100	200	S	200
Computer science	9,300	2,600	S	300	2,300	1,700	700	1,000
Business and Industry	7,200	2,400	S	200	2,200	800	300	500
Industry	7,000	2,300	S	100	2,200	800	300	500
Self employed	100	S	S	S	S	S	S	S
Educ inst, total	600	100	S	S	100	100	S	100
4-yr college/univ.	300	100	S	S	100	S	S	S
Other	300	S	S	S	S	100	S	S
Nonprofit orgs	100	S	S	S	S	S	S	S
Federal Government	500	S	S	S	S	100	100	S
State/local govt	100	100	S	100	S	S	S	S
Other	900	S	S	S	S	600	200	400

See explanatory information and SOURCE at end of table.

Table B-18. 1988 science and engineering master's-degree recipients, by field of degree, type of employer, and primary work activity: 1990

Field of degree and type of employer	Primary work activity						
	Teaching	Production/ inspection	Reporting/ stat work/ computing	Sales	Profes- sional services	Other	No report
Total, all fields	5,900	3,800	7,100	600	600	5,800	100
Business and Industry	400	2,900	5,400	400	S	3,700	S
Industry	400	2,800	5,300	400	S	3,600	S
Self employed	100	100	200	S	S	100	S
Educ inst, total	4,800	S	400	S	S	200	S
4-yr college/univ.	1,300	S	300	S	S	100	S
Other	3,500	S	100	S	S	S	S
Nonprofit orgs	100	200	100	S	400	100	S
Federal Government	S	100	600	100	S	800	S
State/local govt	300	100	100	100	S	400	S
Other	300	400	400	S	200	700	S
No report	S	S	S	S	S	S	100
Total sciences	5,400	2,000	5,600	400	600	4,000	S
Business and Industry	400	1,400	4,200	200	S	2,200	S
Industry	300	1,300	4,100	200	S	2,200	S
Self employed	100	100	100	S	S	100	S
Educ inst, total	4,600	S	400	S	S	100	S
4-yr college/univ.	1,200	S	300	S	S	100	S
Other	3,400	S	100	S	S	S	S
Nonprofit orgs	100	200	100	S	400	100	S
Federal Government	S	100	500	100	S	700	S
State/local govt	300	100	100	100	S	300	S
Other	100	200	300	S	200	500	S
No report	S	S	S	S	S	S	S
Physical sciences	500	400	200	S	S	200	S
Business and Industry	100	200	200	S	S	100	S
Industry	100	200	200	S	S	100	S
Self employed	S	S	S	S	S	S	S
Educ inst, total	500	S	S	S	S	S	S
4-yr college/univ.	100	S	S	S	S	S	S
Other	400	S	S	S	S	S	S
Nonprofit orgs	S	S	S	S	S	S	S
Federal Government	S	100	S	S	S	S	S
State/local govt	S	S	S	S	S	S	S
Other	S	100	S	S	S	S	S
Math/statistics	2,000	200	800	S	S	300	S
Business and Industry	S	100	600	S	S	300	S
Industry	S	100	600	S	S	300	S
Self employed	S	S	S	S	S	S	S
Educ inst, total	1,900	S	100	S	S	S	S
4-yr college/univ.	300	S	100	S	S	S	S
Other	1,600	S	S	S	S	S	S
Nonprofit orgs	S	S	S	S	S	S	S
Federal Government	S	S	S	S	S	S	S
State/local govt	S	S	S	S	S	S	S
Other	S	100	100	S	S	S	S
Computer science	400	400	3,200	100	S	900	S
Business and Industry	100	400	2,800	100	S	600	S
Industry	100	400	2,700	100	S	600	S
Self employed	S	S	100	S	S	S	S
Educ inst, total	300	S	100	S	S	S	S
4-yr college/univ.	S	S	100	S	S	S	S
Other	200	S	S	S	S	S	S
Nonprofit orgs	S	S	S	S	S	S	S
Federal Government	S	S	100	100	S	100	S
State/local govt	S	S	S	S	S	S	S
Other	S	S	100	S	S	100	S

See explanatory information and SOURCE at end of table.

Table B-18. 1988 science and engineering master's-degree recipients, by field of degree, type of employer, and primary work activity: 1990

Field of degree and type of employer	Total employed	Primary work activity						
		Research and development				Management/administration		
		Total	Basic	Applied	Oevelop-ment	Total	Of R&O	Of non-R&O
Environ science.....	2,000	600	100	300	200	200	100	200
Business and Industry.....	1,200	300	S	200	100	100	S	S
Industry.....	1,100	200	S	200	100	100	S	S
Self employed.....	100	S	S	S	S	S	S	S
Educ inst, total....	200	100	100	S	S	S	S	S
4-yr college/univ.	100	100	100	S	S	S	S	S
Other.....	S	S	S	S	S	S	S	S
Nonprofit orgs.....	S	S	S	S	S	S	S	S
Federal Government..	300	200	S	100	100	S	S	S
State/local govt....	200	S	S	S	S	100	S	100
Other.....	100	S	S	S	S	S	S	S
Life sciences.....	5,600	2,100	700	900	500	1,000	500	500
Business and Industry.....	1,600	700	S	300	400	200	100	100
Industry.....	1,500	700	S	300	400	200	100	100
Self employed.....	100	S	S	S	S	S	S	S
Educ inst, total....	1,900	300	200	100	S	300	200	S
4-yr college/univ.	1,000	300	100	100	S	300	200	S
Other.....	900	100	100	S	S	S	S	S
Nonprofit orgs.....	300	S	S	S	S	100	S	100
Federal Government..	900	700	400	200	S	100	S	100
State/local govt....	500	100	100	S	S	300	100	100
Other.....	500	200	100	100	S	S	S	S
Psychology.....	2,100	200	S	S	100	400	100	300
Business and Industry.....	600	100	S	S	100	200	S	200
Industry.....	600	100	S	S	100	200	S	200
Educ inst, total....	400	S	S	S	S	S	S	S
4-yr college/univ.	200	S	S	S	S	S	S	S
Other.....	200	S	S	S	S	S	S	S
Nonprofit orgs.....	600	S	S	S	S	100	S	S
Federal Government..	100	S	S	S	S	S	S	S
State/local govt....	200	S	S	S	S	S	S	S
Other.....	300	S	S	S	S	S	S	S
No report.....	S	S	S	S	S	S	S	S
Social sciences.....	5,900	700	100	500	100	2,000	200	1,800
Business and Industry.....	2,400	300	S	100	100	1,000	100	900
Industry.....	2,200	200	S	100	S	900	100	800
Self employed.....	200	S	S	S	S	100	S	100
Educ inst, total....	1,000	200	100	200	S	100	100	100
4-yr college/univ.	600	200	100	100	S	100	100	100
Other.....	300	S	S	S	S	S	S	S
Nonprofit orgs.....	200	100	S	100	S	100	S	100
Federal Government..	1,100	100	S	100	S	300	S	300
State/local govt....	900	100	S	100	S	300	S	300
Other.....	400	S	S	S	S	100	S	100
Total engineering.....	16,500	8,300	300	1,300	6,700	2,200	900	1,300
Business and Industry.....	13,300	7,000	100	900	6,000	1,700	700	1,000
Industry.....	13,100	7,000	100	800	6,000	1,700	700	1,000
Self employed.....	100	S	S	S	S	S	S	S
Educ inst, total....	600	200	100	100	S	S	S	S
4-yr college/univ.	500	200	100	100	S	S	S	S
Other.....	100	S	S	S	S	S	S	S
Nonprofit orgs.....	200	100	S	100	S	S	S	S
Federal Government..	1,000	600	S	100	400	200	100	100
State/local govt....	500	200	S	100	100	100	S	100
Other.....	900	200	S	100	100	200	100	100
No report.....	100	S	S	S	S	S	S	S

See explanatory information and SOURCE at end of table.

Table B-18. 1988 science and engineering master's-degree recipients, by field of degree, type of employer, and primary work activity: 1990

Field of degree and type of employer	Primary work activity						
	Teaching	Production/ inspection	Reporting/ stat work/ computing	Sales	Profes- sional services	Other	No report
Environ science.....	100	300	300	S	S	500	S
Business and Industry.....	S	300	200	S	S	400	S
Industry.....	S	300	200	S	S	400	S
Self employed.....	S	S	S	S	S	S	S
Educ inst, total....	S	S	S	S	S	S	S
4-yr college/univ.	S	S	S	S	S	S	S
Other.....	S	S	S	S	S	S	S
Nonprofit orgs.....	S	S	S	S	S	S	S
Federal Government..	S	S	100	S	S	S	S
State/local govt....	S	S	S	S	S	S	S
Other.....	S	S	S	S	S	S	S
Life sciences.....	1,200	300	300	S	100	600	S
Business and Industry.....	S	100	100	S	S	300	S
Industry.....	S	100	100	S	S	300	S
Self employed.....	S	S	S	S	S	S	S
Educ inst, total....	1,000	S	100	S	S	100	S
4-yr college/univ.	200	S	100	S	S	100	S
Other.....	800	S	S	S	S	S	S
Nonprofit orgs.....	S	200	S	S	S	S	S
Federal Government..	S	S	100	S	S	S	S
State/local govt....	100	S	S	S	S	100	S
Other.....	S	S	S	S	100	100	S
Psychology.....	400	S	100	S	500	300	S
Business and Industry.....	S	S	S	S	S	200	S
Industry.....	S	S	S	S	S	200	S
Educ inst, total....	200	S	S	S	S	S	S
4-yr college/univ.	100	S	S	S	S	S	S
Other.....	100	S	S	S	S	S	S
Nonprofit orgs.....	S	S	S	S	400	S	S
Federal Government..	S	S	S	S	S	S	S
State/local govt....	100	S	S	S	S	S	S
Other.....	S	S	S	S	100	100	S
No report.....	S	S	S	S	S	S	S
Social sciences.....	900	300	500	200	S	1,200	S
Business and Industry.....	100	300	300	100	S	300	S
Industry.....	100	300	300	100	S	300	S
Self employed.....	S	S	S	S	S	S	S
Educ inst, total....	600	S	S	S	S	S	S
4-yr college/univ.	300	S	S	S	S	S	S
Other.....	300	S	S	S	S	S	S
Nonprofit orgs.....	S	S	S	S	S	S	S
Federal Government..	S	S	S	S	S	600	S
State/local govt....	S	100	S	100	S	200	S
Other.....	S	S	100	S	S	100	S
Total engineering.....	500	1,900	1,500	200	S	1,800	100
Business and Industry.....	100	1,600	1,200	200	S	1,500	S
Industry.....	100	1,500	1,200	200	S	1,500	S
Self employed.....	S	S	S	S	S	S	S
Educ inst, total....	200	S	100	S	S	S	S
4-yr college/univ.	200	S	100	S	S	S	S
Other.....	100	S	S	S	S	S	S
Nonprofit orgs.....	S	S	S	S	S	S	S
Federal Government..	S	S	100	S	S	S	S
State/local govt....	S	S	100	S	S	100	S
Other.....	200	200	S	S	S	100	S
No report.....	S	S	S	S	S	S	100

KEY: S = Data suppressed for statistical reasons

NOTES: Because of rounding, components may not add to totals.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-19. 1988 science and engineering (S&E) master's-degree recipients, by field of degree and field of employment: 1990

Field of degree	Total employed	Employed in non S&E occupation	Employed in S&E occupation	S&E field of employment				
				Chemistry	Physics/ astronomy	Other physical sciences	Math/ stat	Computer science
Total, all fields	48,800	9,100	39,800	800	400	800	3,300	10,000
Total sciences	32,300	7,700	24,600	700	300	800	3,000	8,000
Physical sciences	2,700	300	2,400	700	300	500	S	100
Chemistry	1,200	100	1,100	600	S	200	S	S
Physics/astronomy	1,000	S	900	S	300	S	S	100
Other phys sciences	600	100	500	S	S	300	S	S
Math/statistics	4,600	800	3,800	S	S	S	2,500	700
Computer science	9,300	1,300	8,000	S	S	S	300	6,800
Environ science	2,000	100	1,900	S	S	100	S	100
Life sciences	5,600	1,100	4,500	100	S	100	S	200
Biology	3,400	600	2,800	100	S	100	S	S
Agr science	2,200	500	1,700	S	S	S	S	200
Psychology	2,100	800	1,300	S	S	S	S	S
Social sciences	5,900	3,300	2,600	S	S	S	100	100
Economics	1,600	1,200	400	S	S	S	S	S
Socio/anthro	900	400	400	S	S	S	S	S
Other soc sciences	3,400	1,600	1,800	S	S	S	100	100
Total engineering	16,500	1,400	15,100	100	100	S	400	2,000
Aero/astro	600	200	500	S	S	S	S	S
Chemical	800	S	800	S	S	S	S	S
Civil	1,900	100	1,800	S	S	S	S	S
Elect/electron	5,100	300	4,800	S	S	S	100	1,300
Industrial	1,200	400	800	S	S	S	100	200
Materials	500	S	500	S	S	S	S	S
Mechanical	3,500	200	3,300	S	S	S	100	200
Mining	200	S	200	S	S	S	S	S
Nuclear	100	S	100	S	S	S	S	S
Petroleum	200	S	200	S	S	S	S	S
Other engineering	2,500	200	2,300	S	S	S	100	200

Field of degree	S&E field of employment							
	Environ science	Biology	Agric science	Psychology	Economics	Sociology anthro-pology	Other social sciences	Engineering
Total, all fields	1,600	2,500	2,200	1,200	300	300	1,700	14,600
Total sciences	1,600	2,500	1,900	1,200	300	300	1,700	2,400
Physical sciences	100	100	S	S	S	S	S	500
Chemistry	S	100	S	S	S	S	S	100
Physics/astronomy	100	S	S	S	S	S	S	300
Other phys sciences	S	S	S	S	S	S	S	100
Math/statistics	S	S	100	S	S	S	S	500
Computer science	S	S	S	S	S	S	S	900
Environ science	1,400	S	S	S	S	S	S	200
Life sciences	S	2,300	1,600	S	S	S	S	200
Biology	S	2,200	500	S	S	S	S	S
Agr science	S	200	1,200	S	S	S	S	200
Psychology	S	S	S	1,100	S	S	100	S
Social sciences	S	S	100	100	300	300	1,600	100
Economics	S	S	S	S	300	S	100	S
Socio/anthro	S	S	S	S	S	300	100	S
Other soc sciences	S	S	S	100	100	S	1,400	S
Total engineering	100	S	300	S	S	S	S	12,200
Aero/astro	S	S	S	S	S	S	S	400
Chemical	S	S	S	S	S	S	S	700
Civil	S	S	100	S	S	S	S	1,600
Elect/electron	S	S	200	S	S	S	S	3,200
Industrial	S	S	S	S	S	S	S	500
Materials	S	S	S	S	S	S	S	500
Mechanical	S	S	S	S	S	S	S	3,000
Mining	S	S	S	S	S	S	S	200
Nuclear	S	S	S	S	S	S	S	100
Petroleum	S	S	S	S	S	S	S	200
Other engineering	S	S	S	S	S	S	S	1,900

KEY: S = Data suppressed for statistical reasons

NOTES: Because of rounding, components may not add to totals.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-20. 1988 science and engineering (S&E) master's-degree recipients employed in S&E occupations, by field of degree, type of employer, and primary work activity: 1990

Field of degree	Employed in S&E occupation	Primary work activity						
		Research and development				Management/administration		
		Total	Basic	Applied	Develop-ment	Total	Of R&D	Of non-R&D
Total, all fields	39,800	15,500	1,500	3,800	10,200	4,900	2,100	2,800
Business and Industry	25,200	11,400	200	2,100	9,000	2,700	1,200	1,600
Industry	24,700	11,300	200	2,100	9,000	2,700	1,200	1,600
Self employed	500	100	S	100	S	S	S	S
Educ inst, total	5,800	1,100	600	300	200	300	300	100
4-yr college/univ.	2,700	1,000	500	300	200	200	200	S
Other	3,000	200	100	100	S	100	S	100
Nonprofit orgs	1,200	300	100	200	S	200	100	100
Federal Government	3,500	1,600	500	600	600	500	300	200
State/local govt	1,700	500	100	200	200	600	100	400
Other	2,300	600	100	300	200	600	200	400
No report	S	S	S	S	S	S	S	S
Total sciences	24,600	7,600	1,300	2,500	3,800	3,000	1,200	1,800
Business and Industry	13,100	4,800	200	1,300	3,300	1,400	600	800
Industry	12,700	4,700	200	1,200	3,300	1,400	600	800
Self employed	400	100	S	S	S	S	S	S
Educ inst, total	5,200	900	500	300	200	300	200	100
4-yr college/univ.	2,300	800	400	200	200	200	200	S
Other	3,000	100	100	100	S	100	S	100
Nonprofit orgs	1,100	200	S	100	S	200	100	100
Federal Government	2,500	1,100	400	500	200	300	100	100
State/local govt	1,300	300	100	200	S	400	100	400
Other	1,500	300	100	200	100	400	100	300
Physical sciences	2,400	1,200	200	400	600	100	S	S
Business and Industry	1,400	900	100	400	500	S	S	S
Industry	1,400	900	100	400	500	S	S	S
Educ inst, total	600	100	100	S	S	S	S	S
4-yr college/univ.	200	100	100	S	S	S	S	S
Other	400	S	S	S	S	S	S	S
Nonprofit orgs	100	S	S	S	S	S	S	S
Federal Government	200	100	S	S	S	S	S	S
State/local govt	S	S	S	S	S	S	S	S
Other	100	100	S	S	S	S	S	S
Math/statistics	3,800	600	S	300	300	400	100	200
Business and Industry	1,600	400	S	200	200	200	100	100
Industry	1,600	400	S	200	200	200	100	100
Educ inst, total	1,700	100	S	S	S	S	S	S
4-yr college/univ.	500	100	S	S	S	S	S	S
Other	1,300	S	S	S	S	S	S	S
Nonprofit orgs	S	S	S	S	S	S	S	S
Federal Government	S	S	S	S	S	S	S	S
State/local govt	100	S	S	S	S	S	S	S
Other	300	S	S	S	S	100	S	100
Computer science	8,000	2,500	S	300	2,200	1,200	600	600
Business and Industry	6,600	2,300	S	200	2,100	700	300	400
Industry	6,500	2,200	S	100	2,100	700	300	400
Self employed	100	S	S	S	S	S	S	S
Educ inst, total	400	100	S	S	100	100	S	S
4-yr college/univ.	200	100	S	S	100	S	S	S
Other	200	S	S	S	S	100	S	S
Nonprofit orgs	100	S	S	S	S	S	S	S
Federal Government	400	S	S	S	S	100	100	S
State/local govt	100	100	S	100	S	S	S	S
Other	400	S	S	S	S	200	100	100

See explanatory information and SOURCE at end of table.

Table 8-20. 1988 science and engineering (S&E) master's-degree recipients employed in S&E occupations, by field of degree, type of employer, and primary work activity: 1990

Field of degree	Primary work activity						
	Teaching	Production/ inspection	Reporting/ stat work/ computing	Sales	Profes- sional services	Other	No report
Total, all fields	4,400	3,200	6,400	100	600	4,600	S
Business and Industry	300	2,500	5,100	100	S	3,000	S
Industry	200	2,400	5,000	100	S	3,000	S
Self employed	100	100	200	S	S	100	S
Educ inst, total	3,700	S	400	S	S	100	S
4-yr college/univ.	1,100	S	300	S	S	100	S
Other	2,600	S	100	S	S	S	S
Nonprofit orgs	S	200	100	S	300	100	S
Federal Government	S	100	500	100	S	700	S
State/local govt	200	100	100	S	S	300	S
Other	200	300	200	S	200	400	S
No report	S	S	S	S	S	S	S
Total sciences	3,900	1,400	5,000	100	600	3,100	S
Business and Industry	200	1,000	3,900	S	S	1,700	S
Industry	200	900	3,800	S	S	1,600	S
Self employed	100	100	100	S	S	S	S
Educ inst, total	3,500	S	400	S	S	100	S
4-yr college/univ.	900	S	300	S	S	100	S
Other	2,600	S	100	S	S	S	S
Nonprofit orgs	S	200	100	S	300	100	S
Federal Government	S	100	400	100	S	700	S
State/local govt	200	S	S	S	S	200	S
Other	S	100	200	S	200	300	S
Physical sciences	500	300	200	S	S	100	S
Business and Industry	100	200	200	S	S	100	S
Industry	100	200	200	S	S	100	S
Educ inst, total	400	S	S	S	S	S	S
4-yr college/univ.	100	S	S	S	S	S	S
Other	400	S	S	S	S	S	S
Nonprofit orgs	S	S	S	S	S	S	S
Federal Government	S	100	S	S	S	S	S
State/local govt	S	S	S	S	S	S	S
Other	S	S	S	S	S	S	S
Math/statistics	1,600	200	800	S	S	300	S
Business and Industry	S	100	500	S	S	300	S
Industry	S	100	500	S	S	300	S
Educ inst, total	1,600	S	100	S	S	S	S
4-yr college/univ.	300	S	100	S	S	S	S
Other	1,300	S	S	S	S	S	S
Nonprofit orgs	S	S	S	S	S	S	S
Federal Government	S	S	S	S	S	S	S
State/local govt	S	S	S	S	S	S	S
Other	S	S	100	S	S	S	S
Computer science	200	300	3,000	100	S	700	S
Business and Industry	100	300	2,700	S	S	500	S
Industry	100	300	2,600	S	S	500	S
Self employed	S	S	100	S	S	S	S
Educ inst, total	100	S	100	S	S	S	S
4-yr college/univ.	S	S	100	S	S	S	S
Other	100	S	S	S	S	S	S
Nonprofit orgs	S	S	S	S	S	S	S
Federal Government	S	S	100	100	S	100	S
State/local govt	S	S	>	S	S	S	S
Other	S	S	100	S	S	100	S

See explanatory information and SOURCE at end of table.

Table B-20. 1988 science and engineering (S&E) master's-degree recipients employed in S&E occupations, by field of degree, type of employer, and primary work activity: 1990

Field of degree	Employed in S&E occupation	Primary work activity						
		Research and development				Management/administration		
		Total	Basic	Applied	Develop-ment	Total	Of R&D	Of non-R&D
Environ science.....	1,900	600	100	300	200	200	100	100
Business and Industry.....	1,200	300	S	200	100	S	S	S
Industry.....	1,100	200	S	200	100	S	S	S
Self employed.....	100	S	S	S	S	S	S	S
Educ inst, total....	200	100	100	S	S	S	S	S
4-yr college/univ.	100	100	100	S	S	S	S	S
Other.....	S	S	S	S	S	S	S	S
Nonprofit orgs.....	S	S	S	S	S	S	S	S
Federal Government..	300	200	S	100	100	S	S	S
State/local govt....	100	S	S	S	S	S	S	S
Other.....	100	S	S	S	S	S	S	S
Life sciences.....	4,500	2,000	700	900	400	600	300	300
Business and Industry.....	1,200	600	S	300	300	200	100	100
Industry.....	1,100	600	S	300	300	200	100	100
Self employed.....	100	S	S	S	S	S	S	S
Educ inst, total....	1,600	300	200	100	S	200	200	S
4-yr college/univ.	800	300	100	100	S	200	200	S
Other.....	800	100	100	S	S	S	S	S
Nonprofit orgs.....	300	S	S	S	S	S	S	S
Federal Government..	800	700	400	200	S	S	S	S
State/local govt....	400	100	100	S	S	200	S	100
Other.....	400	200	100	100	S	S	S	S
Psychology.....	1,300	200	S	S	100	S	S	S
Business and Industry.....	300	S	S	S	S	S	S	S
Industry.....	300	S	S	S	S	S	S	S
Educ inst, total....	300	S	S	S	S	S	S	S
4-yr college/univ.	200	S	S	S	S	S	S	S
Other.....	100	S	S	S	S	S	S	S
Nonprofit orgs.....	400	S	S	S	S	S	S	S
Federal Government..	S	S	S	S	S	S	S	S
State/local govt....	100	S	S	S	S	S	S	S
Other.....	200	S	S	S	S	S	S	S
Social sciences.....	2,600	400	100	300	100	600	200	400
Business and Industry.....	800	200	S	100	100	200	100	100
Industry.....	700	200	S	100	S	200	100	100
Self employed.....	100	S	S	S	S	S	S	S
Educ inst, total....	400	100	100	S	S	S	S	S
4-yr college/univ.	200	100	100	S	S	S	S	S
Other.....	200	S	S	S	S	S	S	S
Nonprofit orgs.....	200	100	S	100	S	100	S	100
Federal Government..	700	S	S	S	S	S	S	S
State/local govt....	500	S	S	S	S	200	S	200
Other.....	100	S	S	S	S	S	S	S
Total engineering.....	15,100	7,900	200	1,300	6,400	1,900	800	1,000
Business and Industry.....	12,100	6,600	100	900	5,700	1,300	600	700
Industry.....	12,000	6,600	100	800	5,700	1,300	600	700
Self employed.....	100	S	S	S	S	S	S	S
Educ inst, total....	500	200	100	100	S	S	S	S
4-yr college/univ.	500	200	100	100	S	S	S	S
Other.....	100	S	S	S	S	S	S	S
Nonprofit orgs.....	200	100	S	100	S	S	S	S
Federal Government..	1,000	600	S	100	400	200	100	100
State/local govt....	400	200	S	100	100	100	S	100
Other.....	800	200	S	100	100	200	100	100
No report.....	S	S	S	S	S	S	S	S

See explanatory information and SOURCE at end of table.

Table B-20. 1988 science and engineering (S&E) master's-degree recipients employed in S&E occupations, by field of degree, type of employer, and primary work activity: 1990

Field of degree	Primary work activity						
	Teaching	Production/ inspection	Reporting/ stat work/ computing	Sales	Profes- sional services	Other	No report
Environ science.....	100	300	300	S	S	500	S
Business and Industry.....	S	300	200	S	S	400	S
Industry.....	S	300	200	S	S	400	S
Self employed.....	S	S	S	S	S	S	S
Educ inst, total....	S	S	S	S	S	S	S
4-yr college/univ.	S	S	S	S	S	S	S
Other.....	S	S	S	S	S	S	S
Nonprofit orgs.....	S	S	S	S	S	S	S
Federal Government..	S	S	100	S	S	S	S
State/local govt....	S	S	S	S	S	S	S
Other.....	S	S	S	S	S	S	S
Life sciences.....	900	300	300	S	100	400	S
Business and Industry.....	S	100	100	S	S	200	S
Industry.....	S	S	100	S	S	100	S
Self employed.....	S	S	S	S	S	S	S
Educ inst, total....	900	S	100	S	S	100	S
4-yr college/univ.	200	S	100	S	S	100	S
Other.....	700	S	S	S	S	S	S
Nonprofit orgs.....	S	200	S	S	S	S	S
Federal Government..	S	S	100	S	S	S	S
State/local govt....	S	S	S	S	S	S	S
Other.....	S	S	S	S	100	100	S
Psychology.....	300	S	100	S	500	300	S
Business and Industry.....	S	S	S	S	S	200	S
Industry.....	S	S	S	S	S	200	S
Educ inst, total....	200	S	S	S	S	S	S
4-yr college/univ.	100	S	S	S	S	S	S
Other.....	S	S	S	S	S	S	S
Nonprofit orgs.....	S	S	S	S	300	S	S
Federal Government..	S	S	S	S	S	S	S
State/local govt....	100	S	S	S	S	S	S
Other.....	S	S	S	S	100	100	S
Social sciences.....	400	100	300	S	S	800	S
Business and Industry.....	S	100	200	S	S	100	S
Industry.....	S	100	200	S	S	100	S
Self employed.....	S	S	S	S	S	S	S
Educ inst, total....	300	S	S	S	S	S	S
4-yr college/univ.	200	S	S	S	S	S	S
Other.....	100	S	S	S	S	S	S
Nonprofit orgs.....	S	S	S	S	S	S	S
Federal Government..	S	S	S	S	S	600	S
State/local govt....	S	S	S	S	S	200	S
Other.....	S	S	S	S	S	100	S
Total engineering.....	400	1,800	1,500	S	S	1,600	S
Business and Industry.....	100	1,500	1,200	S	S	1,400	S
Industry.....	100	1,500	1,200	S	S	1,400	S
Self employed.....	S	S	S	S	S	S	S
Educ inst, total....	200	S	S	S	S	S	S
4-yr college/univ.	100	S	S	S	S	S	S
Other.....	100	S	S	S	S	S	S
Nonprofit orgs.....	S	S	S	S	S	S	S
Federal Government..	S	S	100	S	S	S	S
State/local govt....	S	S	100	S	S	100	S
Other.....	100	200	S	S	S	100	S
No report.....	S	S	S	S	S	S	S

KEY: S = Data suppressed for statistical reasons

NOTES: Because of rounding, components may not add to totals.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-21. 1989 science and engineering bachelor's-degree recipients, by field of degree, sex, and graduate school status: 1990

Field of degree and sex	Total	Graduate school status				
		Full-time student	Part-time student	Nonstudent	Other	No report
Total, all fields	322,600	61,800	29,800	225,900	4,700	400
Men	194,000	35,000	16,800	139,500	2,600	100
Women	128,600	26,900	13,000	86,400	2,100	400
Total sciences	247,400	51,800	22,100	169,200	4,000	400
Men	130,900	27,000	10,600	91,200	2,000	100
Women	116,600	24,800	11,500	77,900	2,000	300
Physical sciences	14,300	5,700	1,200	7,300	100	S
Men	9,300	3,800	900	4,600	100	S
Women	5,000	1,900	400	2,700	S	S
Chemistry	8,500	3,600	600	4,200	S	S
Men	4,600	1,900	300	2,300	S	S
Women	3,900	1,700	200	1,900	S	S
Physics/astronomy	4,500	1,700	600	2,300	S	S
Men	3,900	1,500	500	1,900	S	S
Women	600	200	100	300	S	S
Other phys sciences	1,300	400	100	800	S	S
Men	800	300	100	300	S	S
Women	500	S	S	400	S	S
Math/statistics	18,700	3,700	1,200	13,300	500	S
Men	9,700	2,300	500	6,700	200	S
Women	8,900	1,400	700	6,600	200	S
Computer science	34,400	2,400	2,800	28,800	200	100
Men	26,300	2,000	1,900	22,100	200	100
Women	8,100	400	1,000	6,600	100	100
Environ science	3,400	1,000	200	2,200	S	S
Men	2,200	500	200	1,500	S	S
Women	1,200	500	S	700	S	S
Life sciences	52,800	15,000	3,900	33,500	500	S
Men	25,400	6,800	1,700	16,600	200	S
Women	27,400	8,100	2,100	16,800	300	S
Biology	37,800	12,600	2,800	21,900	500	S
Men	16,600	5,900	1,000	9,500	200	S
Women	21,200	6,700	1,800	12,500	300	S
Agr science	15,000	2,400	1,100	11,500	S	S
Men	8,800	900	700	7,200	S	S
Women	6,200	1,500	400	4,400	S	S
Psychology	44,200	9,600	6,300	27,700	400	200
Men	14,100	3,400	2,300	8,400	S	S
Women	30,100	6,200	4,000	19,300	400	200
Social sciences	79,700	14,300	6,500	56,500	2,400	S
Men	43,800	8,100	3,100	31,300	1,300	S
Women	35,900	6,300	3,400	25,100	1,100	S
Economics	24,200	2,700	1,400	19,300	800	S
Men	18,600	2,300	1,200	14,400	600	S
Women	5,600	300	200	4,900	200	S
Socio/anthro	18,700	3,300	2,500	12,500	400	S
Men	6,500	1,000	1,000	4,000	400	S
Women	12,200	2,300	1,500	8,400	S	S
Other soc sciences	36,800	8,400	2,600	24,700	1,200	S
Men	18,700	4,700	900	12,900	200	S
Women	18,100	3,600	1,700	11,800	1,000	S

See explanatory information and SOURCE at end of table.

Table B-21. 1989 science and engineering bachelor's-degree recipients, by field of degree, sex, and graduate school status: 1990

Field of degree and sex	Total	Graduate school status				
		Full-time student	Part-time student	Nonstudent	Other	No report
Total engineering	75,200	10,100	7,700	56,700	600	100
Men	63,100	8,000	6,200	48,300	600	S
Women	12,100	2,100	1,500	8,400	S	100
Aero/astro	3,400	400	100	2,800	S	S
Men	3,100	400	100	2,600	S	S
Women	200	S	S	200	S	S
Chemical	4,000	700	200	3,200	S	S
Men	2,800	500	100	2,200	S	S
Women	1,200	200	100	1,000	S	S
Civil	7,600	900	400	6,300	S	S
Men	6,500	700	400	5,500	S	S
Women	1,100	200	100	800	S	S
Elect/electron	28,300	3,600	3,800	20,400	400	S
Men	24,400	2,900	3,200	18,000	400	S
Women	3,800	700	700	2,400	S	S
Industrial	5,700	400	500	4,900	S	S
Men	4,100	200	300	3,500	S	S
Women	1,700	200	100	1,300	S	S
Materials	900	200	100	600	S	S
Men	700	200	100	400	S	S
Women	200	S	S	200	S	S
Mechanical	15,900	2,100	1,600	12,000	100	100
Men	13,900	1,600	1,500	10,700	100	S
Women	1,900	400	100	1,400	S	100
Mining	400	100	S	300	S	S
Men	400	100	S	200	S	S
Women	100	S	S	100	S	S
Nuclear	400	100	100	300	S	S
Men	300	100	100	200	S	S
Women	100	S	S	100	S	S
Petroleum	500	S	S	400	S	S
Men	400	S	S	300	S	S
Women	100	S	S	S	S	S
Other engineering	8,200	1,600	800	5,700	S	S
Men	6,500	1,300	500	4,700	S	S
Women	1,600	300	400	1,000	S	S

KEY: S = Data suppressed for statistical reasons

NOTES: Because of rounding, components may not add to totals.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-22. 1989 science and engineering (S&E) bachelor's-degree recipients, by field of degree, employment status, and sex: 1990

Field of degree	Total population			Total employed			Employed in S&E occupation		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Total, all fields	323,200	194,000	128,600	276,400	167,600	108,200	170,500	118,000	52,300
Total sciences	247,900	130,900	116,600	208,100	110,300	97,300	108,300	66,300	41,900
Physical sciences	14,300	9,300	5,000	10,600	6,900	3,700	9,200	6,200	3,000
Chemistry	8,500	4,600	3,900	6,100	3,500	2,600	5,700	3,100	2,500
Physics/astronomy	4,500	3,900	600	3,600	3,100	500	2,900	2,500	300
Other phys sciences	1,300	800	500	900	400	500	600	500	100
Math/statistics	18,700	9,700	8,900	16,300	8,600	7,600	12,000	6,000	5,900
Computer science	34,800	26,300	8,100	32,600	24,600	7,500	29,100	22,100	6,900
Environ science	3,400	2,200	1,200	3,100	2,000	1,000	2,800	1,700	1,100
Life sciences	52,800	25,400	27,400	40,500	20,000	20,500	24,800	14,300	10,500
Biology	37,800	16,600	21,200	26,800	12,000	14,800	16,200	8,700	7,500
Agr science	15,000	8,800	6,200	13,700	8,000	5,700	8,600	5,600	3,000
Psychology	44,200	14,100	30,100	38,700	11,600	27,100	11,700	3,500	8,200
Social sciences	79,700	43,800	35,900	66,400	36,500	29,900	18,800	12,500	6,300
Economics	24,200	18,600	5,600	21,600	16,400	5,200	6,600	5,400	1,200
Socio/anthro	18,700	6,500	12,200	15,600	5,300	10,300	4,000	1,800	2,200
Other soc sciences	36,800	18,700	18,100	29,100	14,800	14,300	8,200	5,300	2,900
Total engineering	75,300	63,100	12,100	68,300	57,300	10,900	62,200	51,700	10,400
Aero/astro	3,400	3,100	200	3,100	2,900	200	2,600	2,300	200
Chemical	4,000	2,800	1,200	3,200	2,100	1,200	3,400	2,300	1,100
Civil	7,600	6,500	1,100	6,900	6,000	1,000	6,400	5,500	900
Elect/electron	28,300	24,400	3,800	26,200	22,600	3,500	24,200	20,800	3,300
Industrial	5,800	4,100	1,700	5,200	3,600	1,600	4,600	3,300	1,300
Materials	900	700	200	700	500	200	700	600	100
Mechanical	15,900	13,900	1,900	14,700	13,100	1,600	13,200	11,300	1,800
Mining	400	400	100	300	300	100	400	300	S
Nuclear	400	300	100	400	300	100	300	300	S
Petroleum	500	400	100	400	400	100	400	300	100
Other engineering	8,200	6,500	1,600	7,100	5,600	1,500	6,100	4,700	1,400

See explanatory information and SOURCE at end of table.

Table B-22. 1989 science and engineering (S&E) bachelor's-degree recipients, by field of degree, employment status, and sex: 1990

Field of degree	Unemployed			Outside labor force		
	Total	Men	Women	Total	Men	Women
Total, all fields	11,000	7,100	3,900	35,800	19,200	16,500
Total sciences	8,600	5,000	3,600	31,200	15,500	15,600
Physical sciences	400	400	S	3,300	2,000	1,300
Chemistry	200	200	S	2,200	1,000	1,200
Physics/astronomy	200	200	S	800	700	100
Other phys sciences	S	S	S	400	300	S
Math/statistics	1,000	400	600	1,400	700	700
Computer science	900	700	200	1,400	1,000	400
Environ science	100	S	S	300	200	100
Life sciences	1,500	800	800	10,800	4,600	6,100
Biology	1,300	700	700	9,700	4,000	5,700
Agr science	200	100	100	1,100	600	500
Psychology	800	800	S	4,700	1,700	3,000
Social sciences	4,000	2,000	2,000	9,400	5,300	4,000
Economics	700	500	300	1,800	1,600	200
Socio/anthro	1,200	400	800	1,900	800	1,000
Other soc sciences	2,000	1,100	900	5,700	2,900	2,800
Total engineering	2,400	2,100	300	4,600	3,700	900
Aero/astro	100	100	S	200	200	S
Chemical	100	100	S	700	600	S
Civil	300	200	S	400	300	100
Elect/electron	600	500	S	1,600	1,300	300
Industrial	400	400	S	100	100	S
Materials	S	S	S	100	100	S
Mechanical	600	400	100	600	400	200
Mining	S	S	S	100	100	S
Nuclear	S	S	S	S	S	S
Petroleum	S	S	S	S	S	S
Other engineering	300	300	S	800	600	100

KEY: S = Data suppressed for statistical reasons

NOTES: Because of rounding, components may not add to totals.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-23. 1989 science and engineering (S&E) bachelor's-degree recipients, by field of degree, employment status, and racial/ethnic group: 1990

Field of degree	Total population						Total employed					
	Total	White	Black	Asian	Native American	Hispanic 1/	Total	White	Black	Asian	Native American	Hispanic 1/
Total, all fields	323,200	258,200	17,000	17,500	2,700	12,500	276,400	222,700	14,200	13,800	2,500	10,100
Total sciences	247,900	199,700	13,900	11,500	2,200	9,600	208,100	168,700	11,600	8,700	2,000	7,500
Physical sciences	14,300	11,500	500	1,200	100	600	10,600	8,500	400	700	100	500
Chemistry	8,500	6,600	400	900	S	300	6,100	4,800	300	500	S	200
Physics/astronomy	4,500	3,700	100	300	S	300	3,600	2,900	100	200	S	300
Other phys sciences	1,300	1,200	S	S	S	S	900	800	S	S	S	S
Math/statistics	18,700	14,900	900	900	100	700	16,300	13,200	700	700	100	600
Computer science	34,800	26,500	1,900	3,200	300	1,200	32,600	25,000	1,700	2,700	300	1,100
Environ science	3,400	3,000	S	100	S	S	3,100	2,700	S	100	S	S
Life sciences	52,800	41,600	2,300	2,800	400	1,900	40,500	32,800	1,800	1,600	400	1,100
Biology	37,800	28,200	2,200	2,600	400	1,600	26,800	20,300	1,700	1,400	400	900
Agr science	15,000	13,400	100	200	S	300	13,700	12,500	100	200	S	300
Psychology	44,200	37,800	2,500	800	400	1,700	38,700	32,900	2,100	800	200	1,700
Social sciences	79,700	64,300	5,900	2,500	800	3,400	66,400	53,500	4,900	2,100	800	2,500
Economics	24,200	20,600	600	1,600	200	1,100	21,600	18,500	400	1,400	200	1,000
Socio/anthro	18,700	13,400	2,800	400	200	600	15,600	11,500	2,200	400	200	400
Other soc sciences	36,800	30,300	2,400	400	400	1,700	29,100	23,500	2,300	200	400	1,100
Total engineering	75,300	58,500	3,100	6,000	500	2,900	68,300	54,000	2,700	5,100	500	2,600
Aero/astro	3,400	2,900	100	100	S	200	3,100	2,600	100	100	S	200
Chemical	4,000	3,200	200	200	S	100	3,200	2,600	200	100	S	100
Civil	7,600	5,900	100	400	S	400	6,900	5,500	100	400	S	40
Elect/electron	28,300	19,900	1,700	4,000	100	800	26,200	18,900	1,500	3,600	100	60
Industrial	5,800	4,600	400	200	S	400	5,200	4,400	300	100	S	30
Materials	900	800	S	S	S	S	700	600	S	S	S	S
Mechanical	15,900	13,100	400	700	300	900	14,700	12,100	400	600	300	900
Mining	400	300	S	S	S	S	300	300	S	S	S	S
Nuclear	400	400	S	S	S	S	400	400	S	S	S	S
Petroleum	500	400	S	S	S	S	400	400	S	S	S	S
Other engineering	8,200	6,900	200	200	S	100	7,100	6,300	200	200	S	S

Field of degree	Employed in S&E occupation						Unemployed					
	Total	White	Black	Asian	Native American	Hispanic 1/	Total	White	Black	Asian	Native American	Hispani 1/
Total, all fields	170,500	134,400	7,800	10,800	1,100	6,500	11,000	8,100	700	900	S	600
Total sciences	108,300	86,000	5,500	6,100	700	4,100	8,600	6,800	500	500	S	500
Physical sciences	9,200	7,200	200	900	S	400	400	300	S	S	S	S
Chemistry	5,700	4,300	200	700	S	200	200	100	S	S	S	S
Physics/astronomy	2,900	2,300	S	200	S	200	200	200	S	S	S	S
Other phys sciences	600	600	S	S	S	S	S	S	S	S	S	S
Math/statistics	12,000	9,600	600	500	100	300	1,000	800	S	S	S	S
Computer science	29,100	22,000	1,500	2,500	300	1,100	900	500	100	200	S	S
Environ science	2,800	2,400	S	100	S	S	100	100	S	S	S	S
Life sciences	24,800	20,300	600	1,500	200	700	1,500	1,100	S	S	S	200
Biology	16,200	12,600	500	1,300	200	500	1,300	900	S	S	S	200
Agr science	8,600	7,600	100	200	S	200	200	200	S	S	S	S
Psychology	11,700	10,000	800	200	S	400	800	800	S	S	S	S
Social sciences	18,800	14,300	1,700	300	S	1,200	4,000	3,200	400	200	S	200
Economics	6,600	5,700	200	300	S	300	700	700	100	S	S	S
Socio/anthro	4,000	2,300	800	S	S	200	1,200	800	200	S	S	200
Other soc sciences	8,200	6,200	700	S	S	600	2,000	1,700	100	200	S	S
Total engineering	62,200	48,400	2,300	4,700	400	2,400	2,400	1,400	200	400	S	100
Aero/astro	2,600	2,100	100	100	S	200	100	100	S	S	S	S
Chemical	3,400	2,700	200	200	S	100	100	100	S	S	S	S
Civil	6,400	4,900	100	400	S	400	300	200	S	S	S	S
Elect/electron	24,200	17,400	1,300	3,200	100	600	600	200	100	200	S	100
Industrial	4,600	3,600	300	200	S	200	400	200	100	100	S	S
Materials	700	600	S	S	S	S	S	S	S	S	S	S
Mechanical	13,200	11,000	400	600	200	700	600	500	S	100	S	S
Mining	400	300	S	S	S	S	S	S	S	S	S	S
Nuclear	300	300	S	S	S	S	S	S	S	S	S	S
Petroleum	400	400	S	S	S	S	S	S	S	S	S	S
Other engineering	6,100	5,200	S	100	S	100	300	100	S	S	S	S

See explanatory information and SOURCE at end of table.

Table B-23. 1989 science and engineering (S&E) bachelor's-degree recipients, by field of degree, employment status, and racial/ethnic group: 1990

Field of degree	Outside labor force					
	Total	White	Black	Asian	Native American	Hispanic 1/
Total, all fields.....	35,800	27,300	2,100	2,900	200	1,800
Total sciences.....	31,200	24,200	1,800	2,400	200	1,600
Physical sciences.....	3,300	2,700	100	500	S	100
Chemistry.....	2,200	1,700	100	400	S	S
Physics/astronomy.....	800	600	S	100	S	100
Other phys sciences...	400	400	S	S	S	S
Math/statistics.....	1,400	900	200	200	S	100
Computer science	1,400	1,000	100	300	S	S
Environ science.....	300	200	S	S	S	S
Life sciences.....	10,800	7,700	600	1,200	S	600
Biology.....	9,700	7,000	600	1,200	S	500
Agr science.....	1,100	700	S	S	S	100
Psychology.....	4,700	4,100	400	S	200	S
Social sciences.....	9,400	7,600	600	200	S	800
Economics.....	1,800	1,500	200	200	S	200
Socio/anthro.....	1,900	1,000	400	S	S	S
Other soc sciences....	5,700	5,100	S	S	S	600
Total engineering.....	4,600	3,100	300	400	S	200
Aero/astro.....	200	200	S	S	S	S
Chemical.....	700	500	S	100	S	S
Civil.....	400	300	S	S	S	S
Elect/electron.....	1,600	800	100	200	S	100
Industrial.....	100	100	S	S	S	S
Materials.....	100	100	S	S	S	S
Mechanical.....	600	500	100	S	S	S
Mining.....	100	S	S	S	S	S
Nuclear.....	S	S	S	S	S	S
Petroleum.....	S	S	S	S	S	S
Other engineering.....	800	600	S	100	S	S

1/ Includes members of all racial groups

KEY: S = Data suppressed for statistical reasons

NOTES: Components will not add to totals because (a) racial and ethnic categories are not mutually exclusive, (b) total includes "other" and "no report," and (c) both components and totals have been rounded.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-24. 1989 science and engineering (S&E) bachelor's-degree recipients, by field of degree, employment status, and sex: 1990

Field of degree	Total population			Total employed			Employed in S&E occupation		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Total, all fields	261,300	159,000	101,800	244,700	149,400	94,700	138,800	98,400	40,300
Total sciences	196,100	103,900	91,800	182,000	96,500	85,100	85,000	53,200	31,800
Physical sciences	8,600	5,500	3,000	7,900	5,000	2,800	5,300	3,600	1,700
Chemistry	4,800	2,700	2,200	4,500	2,500	2,000	3,300	1,900	1,400
Physics/astronomy	2,900	2,500	400	2,500	2,200	400	1,700	1,500	200
Other phys sciences	900	400	500	900	400	400	200	200	100
Math/statistics	14,900	7,400	7,500	13,400	6,900	6,500	8,500	4,200	4,300
Computer science	32,400	24,200	7,700	31,000	23,300	7,300	27,000	20,500	6,500
Environ science	2,400	1,700	700	2,200	1,600	600	1,800	1,200	600
Life sciences	37,900	18,600	19,300	35,300	17,700	17,500	18,600	11,100	7,500
Biology	25,200	10,700	14,500	23,100	10,100	13,000	11,800	6,300	5,500
Agr science	12,700	7,900	4,800	12,200	7,600	4,600	6,800	4,800	2,000
Psychology	34,600	10,700	23,900	32,300	9,300	22,900	8,600	2,500	6,100
Social sciences	65,400	35,700	29,600	60,000	32,600	27,400	15,200	10,100	5,100
Economics	21,500	16,200	5,300	20,100	15,300	4,900	5,900	4,800	1,200
Socio/anthro	15,400	5,500	9,900	14,000	4,700	9,300	2,700	1,400	1,300
Other soc sciences	28,400	14,000	14,400	25,900	12,600	13,300	6,500	3,900	2,600
Total engineering	65,200	55,100	10,000	62,700	52,900	9,600	53,800	45,200	8,500
Aero/astro	2,900	2,700	200	2,900	2,700	200	2,300	2,100	200
Chemical	3,400	2,300	1,100	3,000	1,900	1,000	2,700	1,800	900
Civil	6,700	5,800	900	6,400	5,600	800	5,700	4,900	800
Elect/electron	24,700	21,600	3,100	24,200	21,100	3,100	21,500	18,600	2,800
Industrial	5,400	3,900	1,500	4,900	3,500	1,500	3,900	2,800	1,100
Materials	700	500	200	600	400	200	500	400	100
Mechanical	13,800	12,300	1,500	13,100	11,800	1,300	11,200	9,900	1,300
Mining	300	200	100	300	200	100	200	200	S
Nuclear	400	300	100	400	300	100	300	200	S
Petroleum	400	400	100	400	300	100	400	300	S
Other engineering	6,600	5,200	1,300	6,500	5,200	1,300	5,100	3,900	1,200

See explanatory information and SOURCE at end of table.

Table B-24. 1989 science and engineering (S&E) bachelor's-degree recipients, by field of degree, employment status, and sex: 1990

Field of degree	Unemployed			Outside labor force		
	Total	Men	Women	Total	Men	Women
Total, all fields.....	9,600	6,200	3,500	7,000	3,400	3,600
Total sciences.....	7,800	4,500	3,200	6,300	2,900	3,400
Physical sciences.....	400	300	S	400	200	200
Chemistry.....	200	100	S	200	100	100
Physics/astronomy.....	200	200	S	200	100	S
Other phys sciences...	S	S	S	S	S	S
Math/statistics.....	1,000	400	600	600	100	500
Computer science.....	900	700	200	500	300	300
Environ science.....	100	S	S	100	100	S
Life sciences.....	1,300	600	800	1,200	300	1,000
Biology.....	1,100	500	700	1,000	100	900
Agr science.....	200	100	100	200	200	100
Psychology.....	800	800	S	1,500	600	900
Social sciences.....	3,400	1,800	1,600	2,000	1,400	600
Economics.....	700	500	300	700	500	200
Socio/anthro.....	1,000	400	600	400	400	S
Other soc sciences....	1,600	900	700	900	500	400
Total engineering.....	1,900	1,600	200	700	500	100
Aero/astro.....	100	100	S	S	S	S
Chemical.....	100	100	S	300	300	S
Civil.....	200	200	S	100	S	S
Elect/electron.....	400	400	S	100	100	S
Industrial.....	400	400	S	S	S	S
Materials.....	S	S	S	S	S	S
Mechanical.....	500	400	100	200	100	100
Mining.....	S	S	S	S	S	S
Nuclear..... .	S	S	S	S	S	S
Petroleum.....	S	S	S	S	S	S
Other engineering.....	100	100	S	S	S	S

KEY: S = Data suppressed for statistical reasons

NOTES: Because of rounding, components may not add to totals.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-25. 1989 science and engineering (S&E) bachelor's-degree recipients, by field of degree, employment status, and racial/ethnic group: 1990

Field of degree	Total population					
	Total	White	Black	Asian	Native American	Hispanic
Total, all fields	261,300	210,600	14,100	12,500	2,200	10,300
Total sciences	196,100	159,300	11,400	7,700	1,700	7,600
Physical sciences	8,600	6,800	400	600	S	400
Chemistry	4,800	3,700	300	500	S	200
Physics/astronomy	2,900	2,300	100	100	S	200
Other phys sciences	900	800	S	S	S	S
Math/statistics	14,900	12,000	600	800	100	700
Computer science	32,400	25,000	1,700	2,700	300	1,100
Environ science	3,400	2,200	S	100	S	S
Life sciences	37,900	30,100	1,700	1,200	400	900
Biology	25,200	18,600	1,700	1,000	400	700
Agr science	12,700	11,600	100	200	S	200
Psychology	34,600	29,400	2,100	600	200	1,700
Social sciences	65,400	53,700	4,900	1,700	600	2,700
Economics	21,500	19,000	300	1,100	S	1,000
Socio/anthro	15,400	11,300	2,400	500	200	600
Other soc sciences	28,400	23,400	2,200	200	400	1,100
Total engineering	65,200	51,400	2,700	4,800	500	2,800
Aero/astro	2,900	2,500	100	100	S	200
Chemical	3,400	2,700	200	200	S	100
Civil	6,700	5,300	S	400	S	400
Elect/electron	24,700	17,900	1,500	3,300	100	700
Industrial	5,400	4,400	400	200	S	300
Materials	700	600	S	S	S	S
Mechanical	13,800	11,200	400	600	300	900
Mining	300	200	S	S	S	S
Nuclear	400	400	S	S	S	S
Petroleum	400	400	S	S	S	S
Other engineering	6,600	5,900	100	100	S	100

Field of degree	Total employed					
	Total	White	Black	Asian	Native American	Hispanic 1/
Total, all fields	244,700	198,200	12,700	11,400	2,200	9,300
Total sciences	182,000	148,500	10,200	7,000	1,700	6,700
Physical sciences	7,900	6,200	400	500	S	400
Chemistry	4,500	3,400	300	400	S	200
Physics/astronomy	2,500	2,000	100	100	S	200
Other phys sciences	900	800	S	S	S	S
Math/statistics	13,400	10,900	500	700	100	600
Computer science	31,000	24,100	1,600	2,400	300	1,100
Environ science	2,200	2,000	S	100	S	S
Life sciences	35,300	28,500	1,700	1,000	400	700
Biology	23,100	17,400	1,700	800	400	500
Agr science	12,200	11,200	100	200	S	200
Psychology	32,300	27,400	1,700	600	200	1,700
Social sciences	60,000	49,300	4,300	1,700	600	2,200
Economics	20,100	17,600	300	1,100	S	1,000
Socio/anthro	14,000	10,500	2,000	400	200	400
Other soc sciences	25,900	21,200	2,100	200	400	900
Total engineering	62,700	49,700	2,500	4,400	500	2,600
Aero/astro	2,900	2,500	100	100	S	200
Chemical	3,000	2,400	200	100	S	100
Civil	6,400	5,100	S	400	S	400
Elect/electron	24,200	17,700	1,400	3,100	100	500
Industrial	4,900	4,100	300	100	S	300
Materials	600	500	S	S	S	S
Mechanical	13,100	10,600	400	600	300	900
Mining	300	200	S	S	S	S
Nuclear	400	400	S	S	S	S
Petroleum	400	400	S	S	S	S
Other engineering	6,500	5,900	100	100	S	S

See explanatory information and SOURCE at end of table.

Table B-25. 1989 science and engineering (S&E) bachelor's-degree recipients, by field of degree, employment status, and racial/ethnic group: 1990

Field of degree	Employed in S&E occupation					
	Total	White	Black	Asian	Native American	Hispanic 1/
Total, all fields	138,800	111,000	5,700	8,500	1,000	5,400
Total sciences	85,000	68,400	3,700	4,700	700	3,200
Physical sciences	5,300	4,000	200	500	S	300
Chemistry	3,300	2,400	200	400	S	100
Physics/astronomy	1,700	1,300	S	100	S	100
Other phys sciences	200	200	S	S	S	S
Math/statistics	8,500	7,000	300	500	100	200
Computer science	27,000	20,800	1,200	2,300	300	900
Environ science	1,800	1,600	S	100	S	S
Life sciences	18,600	15,400	600	700	200	400
Biology	11,800	9,400	500	500	200	300
Agr science	6,800	6,000	100	200	S	200
Psychology	8,600	7,600	200	200	S	400
Social sciences	15,200	12,100	1,200	300	S	1,000
Economics	5,900	5,300	S	300	S	300
Socio/anthro	2,700	1,700	600	S	S	200
Other soc sciences	6,500	5,100	600	S	S	400
Total engineering	53,800	42,600	2,000	3,700	400	2,200
Aero/astro	2,300	1,900	100	100	S	200
Chemical	2,700	2,200	100	100	S	100
Civil	5,700	4,300	S	400	S	400
Elect/electron	21,500	16,000	1,100	2,500	100	600
Industrial	3,900	3,200	300	100	S	200
Materials	500	400	S	S	S	S
Mechanical	11,200	9,200	300	500	200	700
Mining	200	200	S	S	S	S
Nuclear	300	300	S	S	S	S
Petroleum	400	300	S	S	S	S
Other engineering	5,100	4,600	S	100	S	S

Field of degree	Unemployed					
	Total	White	Black	Asian	Native American	Hispanic 1/
Total, all fields	9,600	7,200	700	700	S	600
Total sciences	7,800	6,100	500	300	S	500
Physical sciences	400	300	S	S	S	S
Chemistry	200	100	S	S	S	S
Physics/astronomy	200	200	S	S	S	S
Other phys sciences	S	S	S	S	S	S
Math/statistics	1,000	800	S	S	S	S
Computer science	900	500	100	200	S	S
Environ science	100	100	S	S	S	S
Life sciences	1,300	900	S	S	S	200
Biology	1,100	700	S	S	S	200
Agr science	200	200	S	S	S	S
Psychology	800	800	S	S	S	S
Social sciences	3,400	2,800	400	S	S	200
Economics	700	700	100	S	S	S
Socio/anthro	1,000	600	200	S	S	200
Other soc sciences	1,600	1,500	100	S	S	S
Total engineering	1,900	1,100	100	400	S	100
Aero/astro	100	100	S	S	S	S
Chemical	100	100	S	S	S	S
Civil	200	200	S	S	S	S
Elect/electron	400	100	100	200	S	100
Industrial	400	200	100	100	S	S
Materials	S	S	S	S	S	S
Mechanical	500	500	S	100	S	S
Mining	S	S	S	S	S	S
Nuclear	S	S	S	S	S	S
Petroleum	S	S	S	S	S	S
Other engineering	100	S	S	S	S	S

See explanatory information and SOURCE at end of table.

Table B-25. 1989 science and engineering (S&E) bachelor's-degree recipients, by field of degree, employment status, and racial/ethnic group: 1990

Field of degree	Outside labor force					
	Total	White	Black	Asian	Native American	Hispanic 1/
Total, all fields	7,000	5,200	700	400	S	400
Total sciences	6,300	4,600	700	400	S	400
Physical sciences	400	300	S	S	S	100
Chemistry	200	200	S	S	S	S
Physics/astronomy	200	100	S	S	S	S
Other phys sciences	S	S	S	S	S	S
Math/statistics	600	300	100	100	S	100
Computer science	500	400	S	100	S	S
Environ science	100	100	S	S	S	S
Life sciences	1,200	700	S	200	S	S
Biology	1,000	500	S	200	S	S
Agr science	200	200	S	S	S	S
Psychology	1,500	1,100	400	S	S	S
Social sciences	2,000	1,600	200	S	S	200
Economics	700	700	S	S	S	S
Socio/anthro	400	200	200	S	S	S
Other soc sciences	900	700	S	S	S	200
Total engineering	700	600	S	S	S	S
Aero/astro	S	S	S	S	S	S
Chemical	300	300	S	S	S	S
Civil	100	100	S	S	S	S
Elect/electron	100	100	S	S	S	S
Industrial	S	S	S	S	S	S
Materials	S	S	S	S	S	S
Mechanical	200	100	S	S	S	S
Mining	S	S	S	S	S	S
Nuclear	S	S	S	S	S	S
Petroleum	S	S	S	S	S	S
Other engineering	S	S	S	S	S	S

1/ Includes members of all racial groups

KEY: S = Data suppressed for statistical reasons

NOTES: Components will not add to totals because (a) racial and ethnic categories are not mutually exclusive, (b) total includes "other" and "no report," and (c) both components and totals have been rounded.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-26. 1989 science and engineering bachelor's-degree recipients, by field of degree, sex, and type of employer: 1990

Field of degree and sex	Total employed	Type of employer										
		Business and industry			Educational institutions			Non-profit orgs	Federal Government	State/local governments	Other	No report
		Total	Industry	Self-employed	Total	4-yr college univ	Other					
Total, all fields	244,100	155,000	150,000	5,000	24,500	8,100	16,400	13,000	10,400	14,300	26,000	1,000
Men	149,400	105,900	102,000	3,800	11,200	4,800	6,400	2,600	7,400	8,000	13,900	500
Women	94,700	49,100	48,000	1,100	13,300	3,200	10,000	10,400	3,100	6,300	12,200	500
Total sciences	181,600	105,900	101,800	4,100	22,700	6,900	15,800	12,600	6,600	11,600	21,400	800
Men	96,500	64,700	61,700	3,000	9,900	4,000	5,900	2,300	4,100	5,700	9,600	300
Women	85,100	41,200	40,100	1,100	12,900	2,900	10,000	10,300	2,500	6,000	11,800	500
Physical sciences	7,900	5,100	5,000	100	1,300	300	900	200	300	200	800	S
Men	5,000	3,200	3,100	100	600	300	400	200	100	200	700	S
Women	2,800	1,900	1,900	S	700	100	600	S	100	100	100	S
Chemistry	4,500	3,300	3,200	S	400	200	300	100	100	200	400	S
Men	2,500	1,600	1,600	S	200	100	100	100	S	100	400	S
Women	2,000	1,600	1,600	S	300	100	200	S	S	S	100	S
Physics/astronomy	2,500	1,600	1,600	S	400	200	200	100	100	S	300	S
Men	2,200	1,300	1,300	S	300	200	200	100	100	S	200	S
Women	400	300	300	S	S	S	S	S	S	S	S	S
Other phys sciences	900	200	200	S	500	S	500	S	S	S	100	S
Men	400	200	200	S	100	S	100	S	S	S	100	S
Women	400	S	S	S	400	S	400	S	S	S	S	S
Math/statistics	13,400	7,500	7,400	100	3,800	600	3,200	300	100	200	1,400	100
Men	6,900	4,100	4,000	100	1,600	400	1,200	100	100	200	900	S
Women	6,500	3,400	3,400	S	2,200	200	2,000	200	100	S	500	100
Computer science	30,600	25,300	24,700	600	2,000	1,400	500	200	1,000	600	1,200	300
Men	23,300	19,400	18,800	600	1,500	1,100	400	100	700	400	900	300
Women	7,300	5,900	5,900	S	500	400	100	100	300	200	300	S
Environ science	2,200	1,600	1,600	S	200	100	100	S	100	S	200	S
Men	1,600	1,200	1,200	S	100	100	S	S	S	S	200	S
Women	600	500	400	S	100	S	100	S	S	S	S	S
Life sciences	35,300	16,400	15,400	1,100	6,100	2,400	3,700	1,700	1,400	3,000	6,600	S
Men	17,700	9,400	8,400	1,000	2,900	1,200	1,700	400	1,000	1,700	2,400	S
Women	17,500	7,000	7,000	100	3,200	1,200	2,000	1,300	500	1,300	4,200	S
Biology	23,100	10,100	9,700	400	4,300	1,400	2,900	1,100	400	1,900	5,200	S
Men	10,100	5,100	4,700	400	2,000	600	1,400	200	200	900	1,700	S
Women	13,000	5,000	5,000	S	2,300	800	1,500	800	200	1,000	3,500	S
Agr science	12,200	6,300	5,700	600	1,800	1,000	800	700	1,000	1,000	1,400	S
Men	7,600	4,300	3,700	600	900	600	300	200	700	700	700	S
Women	4,600	2,000	1,900	100	900	400	500	500	300	300	700	S
Psychology	32,300	13,200	12,900	400	4,000	800	3,200	6,800	800	2,900	4,500	200
Men	9,300	6,100	6,100	S	800	200	600	1,100	200	100	1,000	S
Women	22,900	7,100	6,200	400	3,200	600	2,600	5,600	600	2,800	3,400	200
Social sciences	60,000	36,700	34,900	1,800	5,400	1,200	4,200	3,400	3,000	4,600	6,700	200
Men	32,600	21,300	20,100	1,200	2,300	700	1,600	400	2,000	3,000	3,400	S
Women	27,400	15,400	14,700	600	3,000	500	2,600	3,000	1,000	1,600	3,200	200
Economics	20,100	17,100	16,100	1,000	300	S	300	200	1,200	500	900	S
Men	15,300	12,900	11,900	1,000	300	S	300	S	800	500	700	S
Women	4,900	4,200	4,200	S	S	S	S	200	400	S	200	S
Socio/anthro	14,000	6,200	6,000	200	2,400	800	1,700	1,300	400	1,500	1,900	200
Men	4,700	1,800	1,800	S	1,000	500	400	400	S	1,100	400	S
Women	9,300	4,400	4,200	200	1,500	200	1,200	900	400	400	1,500	200
Other soc sciences	25,900	13,400	12,800	600	2,600	400	2,200	1,900	1,400	2,600	3,900	S
Men	12,600	6,600	6,400	200	1,100	200	800	S	1,200	1,500	2,300	S
Women	13,300	6,800	6,400	400	1,500	200	1,300	1,900	200	1,200	1,600	S

See explanatory information and SOURCE at end of table.

Table 8-26. 1989 science and engineering bachelor's-degree recipients, by field of degree, sex, and type of employer: 1990

Field of degree and sex	Total employed	Type of employer										
		Business and industry			Educational institutions			Non-profit orgs	Federal Government	State/local governments	Other	No report
		Total	Industry	Self-employed	Total	4-yr college univ	Other					
Total engineering	62,600	49,100	48,300	900	1,800	1,200	500	400	3,800	2,600	4,700	200
Men	52,900	41,200	40,400	900	1,400	800	500	300	3,300	2,300	4,300	200
Women	9,600	7,900	7,900	S	400	400	S	100	500	300	400	S
Aero/astro	2,900	1,700	1,700	S	S	S	S	S	400	S	700	S
Men	2,700	1,500	1,500	S	S	S	S	S	400	S	600	S
Women	200	200	200	S	S	S	S	S	S	S	S	S
Chemical	3,000	2,600	2,600	S	100	S	S	S	100	100	100	S
Men	1,900	1,700	1,700	S	100	S	S	S	S	S	S	S
Women	1,000	900	900	S	S	S	S	S	100	S	S	S
Civil	6,400	4,400	4,300	200	S	S	S	S	200	1,300	500	100
Men	5,600	3,800	3,600	200	S	S	S	S	200	1,200	400	100
Women	800	600	600	S	S	S	S	S	S	100	S	S
Elect/electron	24,100	19,600	19,300	400	1,100	700	300	200	1,400	600	1,100	100
Men	21,100	17,200	16,900	400	900	500	300	100	1,200	600	1,000	100
Women	3,100	2,400	2,400	S	200	200	S	100	300	S	100	S
Industrial	4,900	4,100	4,100	S	S	S	S	S	300	100	300	S
Men	3,500	2,800	2,800	S	S	S	S	S	200	100	300	S
Women	1,500	1,300	1,300	S	S	S	S	S	100	S	S	S
Materials	600	500	500	S	S	S	S	S	S	S	S	S
Men	400	400	300	S	S	S	S	S	S	S	S	S
Women	200	100	100	S	S	S	S	S	S	S	S	S
Mechanical	13,100	10,300	10,200	100	200	100	S	100	1,100	200	1,200	S
Men	11,800	9,100	9,000	100	100	100	S	100	1,100	200	1,200	S
Women	1,300	1,200	1,200	S	S	S	S	S	S	S	100	S
Mining	300	200	200	S	S	S	S	S	S	S	S	S
Men	200	200	200	S	S	S	S	S	S	S	S	S
Women	100	100	100	S	S	S	S	S	S	S	S	S
Nuclear	400	200	200	S	S	S	S	S	S	S	100	S
Men	300	200	200	S	S	S	S	S	S	S	100	S
Women	100	S	S	S	S	S	S	S	S	S	S	S
Petroleum	400	300	300	S	S	S	S	S	S	S	S	S
Men	300	300	300	S	S	S	S	S	S	S	S	S
Women	100	100	100	S	S	S	S	S	S	S	S	S
Other engineering	6,500	5,100	4,900	100	300	200	100	S	200	300	600	S
Men	5,200	4,000	3,800	100	300	100	100	S	100	200	600	S
Women	1,300	1,100	1,100	S	100	100	S	S	S	100	S	S

KEY: S = Data suppressed for statistical reasons

NOTES: Because of rounding, components may not add to totals.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-27. 1989 science and engineering bachelor's-degree recipients, by field of degree, sex, and primary work activity: 1990

Field of degree and sex	Total employed	Primary work activity						
		Research and development				Management/administration		
		Total	Basic	Applied	Develop-ment	Total	Of R&D	Of non-R&D
Total, all fields	244,100	47,400	5,100	11,800	30,500	32,900	5,900	27,100
Men	149,400	32,900	2,700	5,300	24,900	19,500	3,700	15,800
Women	94,700	14,500	2,400	6,500	5,600	13,400	2,100	11,300
Total sciences	181,600	24,600	4,700	9,600	10,200	26,300	4,400	21,800
Men	96,500	13,600	2,400	3,900	7,400	13,600	2,500	11,200
Women	85,100	10,900	2,300	5,800	2,800	12,600	1,900	10,700
Physical sciences	7,900	2,400	600	800	1,000	700	100	600
Men	5,000	1,600	500	500	600	500	S	400
Women	2,800	800	S	400	400	200	100	200
Chemistry	4,500	1,700	400	600	700	500	100	400
Men	2,500	1,000	400	300	300	200	S	200
Women	2,000	700	S	300	400	200	100	200
Physics/astronomy	2,500	600	100	200	300	200	S	200
Men	2,200	500	100	100	300	200	S	200
Women	400	100	S	S	100	S	S	S
Other phys sciences	900	100	S	100	S	100	S	100
Men	400	100	S	S	S	100	S	100
Women	400	100	S	100	S	S	S	S
Math/statistics	13,400	1,000	300	300	400	900	200	700
Men	6,900	500	100	100	300	500	100	400
Women	6,500	500	100	300	100	400	100	300
Computer science	30,600	6,700	200	400	6,100	2,000	500	1,500
Men	23,300	5,400	100	300	5,000	1,600	400	1,200
Women	7,300	1,300	100	100	1,100	400	100	300
Environ science	2,200	400	200	200	S	200	S	200
Men	1,600	300	200	100	S	100	S	100
Women	600	100	S	100	S	100	S	100
Life sciences	35,300	8,200	3,000	3,400	1,900	4,100	600	3,500
Men	17,700	3,700	1,100	1,500	1,100	1,900	500	1,400
Women	17,500	4,600	1,800	1,900	800	2,200	100	2,000
Biology	23,100	6,600	2,800	2,600	1,200	1,900	S	1,900
Men	10,100	2,800	1,100	1,200	500	500	S	500
Women	13,000	3,800	1,700	1,400	700	1,400	S	1,400
Agr science	12,200	1,600	100	800	700	2,200	600	1,600
Men	7,600	900	S	300	600	1,400	500	1,000
Women	4,600	700	100	500	100	700	100	600
Psychology	32,300	2,500	400	1,600	600	5,000	800	4,300
Men	9,300	800	200	400	200	1,600	200	1,400
Women	22,900	1,800	200	1,200	400	3,500	600	2,900
Social sciences	60,000	3,300	300	2,800	200	13,300	2,300	11,100
Men	32,600	1,500	200	1,100	200	7,500	1,300	6,200
Women	27,400	1,800	100	1,700	S	5,900	1,000	4,800
Economics	20,100	1,300	200	1,100	S	5,400	1,200	4,200
Men	15,300	600	200	500	S	4,200	1,000	3,200
Women	4,900	700	S	700	S	1,200	200	1,000
Socio/anthro	14,000	600	S	600	S	1,900	S	1,900
Men	4,700	200	S	200	S	600	S	600
Women	9,300	400	S	400	S	1,300	S	1,300
Other soc sciences	25,900	1,400	100	1,100	200	6,100	1,100	5,000
Men	12,600	600	S	400	200	2,700	200	2,400
Women	13,300	700	100	600	S	3,400	900	2,600

See explanatory information and SOURCE at end of table.

Table B-27. 1989 science and engineering bachelor's-degree recipients, by field of degree, sex, and primary work activity: 1990

Field of degree and sex	Primary work activity						
	Teaching	Production/ inspection	Reporting/ stat work/ computing	Sales	Profes- sional services	Other	No report
Total, all fields	24,900	31,800	35,500	25,300	3,800	49,800	1,700
Men	8,500	25,300	24,100	15,000	1,400	21,700	900
Women	16,400	6,400	11,400	10,300	2,400	19,200	800
Total sciences	23,700	17,600	29,400	23,000	3,700	32,100	1,300
Men	7,500	13,200	19,200	12,900	1,400	14,400	600
Women	16,200	4,500	10,200	10,000	2,300	17,600	700
Physical sciences	800	1,300	800	900	S	1,000	S
Men	300	900	500	500	S	800	S
Women	500	400	300	300	S	200	S
Chemistry	100	1,000	200	600	S	500	S
Men	S	600	S	300	S	300	S
Women	100	400	100	300	S	200	S
Physics/astronomy	200	300	500	300	S	400	S
Men	100	300	400	300	S	400	S
Women	100	S	100	S	S	S	S
Other phys sciences	500	S	S	S	S	100	S
Men	100	S	S	S	S	100	S
Women	400	S	S	S	S	S	S
Math/statistics	3,800	900	3,400	1,400	S	1,900	100
Men	1,500	600	2,100	600	S	1,200	100
Women	2,300	300	1,300	800	S	800	S
Computer science	700	2,200	14,900	700	100	3,100	300
Men	500	1,600	10,800	500	S	2,600	300
Women	100	700	4,100	100	100	500	S
Environ science	200	500	300	100	S	500	S
Men	100	400	200	100	S	300	S
Women	100	100	100	S	S	200	S
Life sciences	4,200	7,400	1,200	2,300	1,200	6,400	300
Men	1,800	5,600	800	700	300	2,900	S
Women	2,400	1,800	400	1,600	900	3,500	300
Biology	3,300	4,800	500	1,500	900	3,500	S
Men	1,400	3,600	200	S	100	1,500	S
Women	1,900	1,200	300	1,400	900	2,000	S
Agr science	900	2,600	600	900	300	2,900	300
Men	400	2,100	500	600	300	1,400	S
Women	500	500	100	200	S	1,500	300
Psychology	7,800	1,100	1,500	4,700	1,500	7,900	200
Men	1,600	700	800	2,100	500	1,300	S
Women	6,200	400	800	2,600	1 000	6,600	200
Social sciences	6,300	4,200	7,400	12,900	900	11,200	400
Men	1,700	3,300	4,100	8,400	600	5,300	200
Women	4,600	800	3,300	4,600	300	5,900	200
Economics	500	1,100	2,800	6,300	S	2,500	200
Men	500	900	2,200	5,200	S	1,500	200
Women	S	200	600	1,200	S	1,000	S
Socio/anthro	2,000	500	2,400	2,200	600	3,600	200
Men	200	500	1,000	200	600	1,300	S
Women	1,800	S	1,400	2,000	S	2,300	200
Other soc sciences	3,900	2,600	2,100	4,400	300	5,100	S
Men	1,000	1,900	900	3,000	S	2,500	S
Women	2,800	700	1,300	1,400	300	2,600	S

See explanatory information and SOURCE at end of table.

Table B-27. 1989 science and engineering bachelor's-degree recipients, by field of degree, sex, and primary work activity: 1990

Field of degree and sex	Total employed	Primary work activity						
		Research and development				Management/administration		
		Total	Basic	Applied	Develop-ment	Total	Of R&D	Of non-R&D
Total engineering	62,600	22,800	400	2,100	20,200	6,700	1,500	5,200
Men	52,900	19,300	400	1,500	17,500	5,900	1,300	4,600
Women	9,600	3,500	S	700	2,800	800	200	600
Aero/astro	2,900	1,100	S	200	900	300	100	200
Men	2,700	1,000	S	100	800	300	100	200
Women	200	100	S	S	100	S	S	S
Chemical	3,000	1,500	100	200	1,200	300	100	200
Men	1,900	1,000	100	100	800	200	100	100
Women	1,000	500	S	S	400	100	S	100
Civil	6,400	1,300	S	100	1,200	1,000	100	1,000
Men	5,600	1,100	S	100	1,000	900	100	900
Women	800	200	S	S	200	100	S	100
Elect/electron	24,100	9,500	100	1,000	8,400	2,700	800	1,900
Men	21,100	8,300	100	700	7,500	2,400	600	1,700
Women	3,100	1,200	S	300	900	300	100	100
Industrial	4,900	900	S	100	800	700	200	500
Men	3,500	500	S	S	500	500	100	400
Women	1,500	400	S	100	300	100	S	100
Materials	600	300	S	100	200	100	S	S
Men	400	200	S	S	100	S	S	S
Women	200	100	S	100	S	S	S	S
Mechanical	13,100	6,000	100	400	5,500	1,200	100	1,100
Men	11,800	5,300	100	200	5,000	1,100	100	1,100
Women	1,300	600	S	100	500	100	S	100
Mining	300	100	S	S	S	S	S	S
Men	200	S	S	S	S	S	S	S
Women	100	S	S	S	S	S	S	S
Nuclear	400	100	S	S	100	S	S	S
Men	300	100	S	S	100	S	S	S
Women	100	S	S	S	S	S	S	S
Petroleum	400	100	S	S	S	S	S	S
Men	300	100	S	S	S	S	S	S
Women	100	S	S	S	S	S	S	S
Other engineering	6,500	2,100	S	200	1,900	400	100	300
Men	5,200	1,700	S	100	1,500	400	100	300
Women	1,300	400	S	100	300	S	S	S

See explanatory information and SOURCE at end of table.

Table B-27. 1989 science and engineering bachelor's-degree recipients, by field of degree, sex, and primary work activity: 1990

Field of degree and sex	Primary work activity						
	Teaching	Production/ inspection	Reporting/ stat work/ computing	Sales	Profes- sional services	Other	No report
Total engineering	1,200	14,200	6,200	2,300	100	8,800	400
Men	1,000	12,200	4,900	2,100	S	7,300	300
Women	200	2,000	1,200	300	100	1,500	100
Aero/astro	100	300	200	S	S	800	S
Men	100	200	200	S	S	800	S
Women	S	100	S	S	S	S	S
Chemical	S	800	100	S	S	300	S
Men	S	500	100	S	S	100	S
Women	S	300	S	S	S	100	S
Civil	S	1,600	500	100	S	1,800	100
Men	S	1,600	400	100	S	1,500	100
Women	S	100	100	S	S	300	S
Elect/electron	400	5,200	3,000	900	S	2,300	200
Men	400	4,500	2,600	900	S	2,000	200
Women	100	700	400	100	S	300	S
Industrial	100	1,100	800	400	S	600	100
Men	S	1,100	600	300	S	400	S
Women	100	300	200	100	S	200	S
Materials	S	100	S	S	S	100	S
Men	S	100	S	S	S	S	S
Women	S	S	S	S	S	S	S
Mechanical	400	3,100	600	400	S	1,400	S
Men	400	2,700	600	400	S	1,200	S
Women	S	400	S	S	S	200	S
Mining	S	100	S	S	S	100	S
Men	S	100	S	S	S	100	S
Women	S	S	S	S	S	S	S
Nuclear	S	S	100	S	100	S	S
Men	S	S	100	S	S	S	S
Women	S	S	S	S	100	S	S
Petroleum	S	200	S	S	S	S	S
Men	S	200	S	S	S	S	S
Women	S	S	S	S	S	S	S
Other engineering	100	1,200	800	400	S	1,400	S
Men	100	1,200	300	400	S	1,100	S
Women	S	100	500	S	S	300	S

KEY: S = Data suppressed for statistical reasons

NOTES: Because of rounding, components may not add to totals.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-28. 1989 science and engineering bachelor's-degree recipients, by field of degree, type of employer, and primary work activity: 1990

Field of degree and type of employer	Total employed	Primary work activity						
		Research and development				Management/administration		
		Total	Basic	Applied	Develop-ment	Total	Of R&D	Of non-R&D
Total, all fields	244,700	47,500	5,100	11,800	30,600	32,900	5,900	27,100
Business and Industry	155,600	33,600	1,100	5,300	27,200	21,400	3,800	17,600
Industry	150,600	33,300	1,100	5,300	26,900	20,100	3,600	16,500
Self employed	5,000	300	S	S	300	1,300	200	1,100
Educ inst, total	24,500	4,100	1,600	2,000	500	1,100	300	900
4-yr college/univ.	8,100	2,500	1,100	1,000	400	600	100	600
Other	16,400	1,500	500	900	100	500	200	300
Nonprofit orgs	13,000	1,400	600	400	300	1,700	200	1,400
Federal Government	10,400	3,400	300	1,600	1,500	1,000	400	600
State/local govt	14,300	2,500	800	1,000	600	2,500	400	2,100
Other	26,000	2,500	700	1,500	300	5,300	800	4,600
No report	1,000	100	S	S	100	S	S	S
Total sciences	182,000	24,600	4,700	9,600	10,200	26,300	4,400	21,800
Business and Industry	106,300	14,200	800	4,100	9,300	16,900	2,700	14,300
Industry	102,200	14,100	800	4,100	9,200	15,900	2,500	13,400
Self employed	4,100	200	S	S	200	1,000	100	900
Educ inst, total	22,700	3,200	1,600	1,500	100	1,000	300	800
4-yr college/univ.	6,900	1,800	1,100	700	100	600	100	500
Other	15,800	1,400	500	900	S	500	200	300
Nonprofit orgs	12,600	1,300	600	400	200	1,600	200	1,300
Federal Government	6,600	1,700	300	1,300	200	500	200	300
State/local govt	11,600	2,100	800	1,000	300	2,100	400	1,700
Other	21,400	2,000	700	1,300	100	4,200	600	3,500
No report	800	S	S	S	S	S	S	S
Physical sciences	7,900	2,400	600	800	1,000	700	100	600
Business and Industry	5,100	1,500	100	500	900	300	100	300
Industry	5,000	1,500	100	500	900	300	100	300
Self employed	100	S	S	S	S	S	S	S
Educ inst, total	1,300	400	200	200	S	100	S	100
4-yr college/univ.	300	200	200	S	S	S	S	S
Other	900	200	S	200	S	S	S	S
Nonprofit orgs	200	S	S	S	S	S	S	S
Federal Government	300	100	S	100	S	S	S	S
State/local govt	200	100	S	S	S	S	S	S
Other	800	300	200	S	S	300	S	300
No report	S	S	S	S	S	S	S	S
Math/statistics	13,400	1,000	300	300	400	900	200	700
Business and Industry	7,500	700	100	200	400	600	200	400
Industry	7,400	600	100	200	300	600	200	400
Self employed	100	100	S	S	100	S	S	S
Educ inst, total	3,800	100	100	S	S	100	S	100
4-yr college/univ.	600	100	100	S	S	100	S	100
Other	3,200	S	S	S	S	S	S	S
Nonprofit orgs	300	100	S	100	S	S	S	S
Federal Government	100	100	S	100	S	S	S	S
State/local govt	200	S	S	S	S	S	S	S
Other	1,400	100	100	S	S	300	S	200
No report	100	S	S	S	S	S	S	S
Computer science	31,000	6,700	200	400	6,100	2,000	500	1,500
Business and Industry	25,700	6,300	100	300	5,900	1,500	400	1,100
Industry	25,100	6,200	100	300	5,800	1,400	400	1,000
Self employed	600	100	S	S	100	100	S	100
Educ inst, total	2,000	100	S	100	S	S	S	S
4-yr college/univ.	1,400	100	S	100	S	S	S	S
Other	500	S	S	S	S	S	S	S
Nonprofit orgs	200	S	S	S	100	100	S	100
Federal Government	1,000	200	S	S	S	S	S	S
State/local govt	600	S	S	S	S	300	S	300
Other	1,200	S	S	S	S	S	S	S
No report	300							

See explanatory information and SOURCE at end of table.

Table B-28. 1989 science and engineering bachelor's-degree recipients, by field of degree, type of employer, and primary work activity: 1990

Field of degree and type of employer	Primary work activity						
	Teaching	Production/ inspection	Reporting/ stat work/ computing	Sales	Profes- sional services	Other	No report
Total, all fields.....	24,900	31,800	35,600	25,300	3,800	41,200	1,700
Business and Industry.....	3,500	24,800	26,900	22,900	500	21,200	700
Industry.....	3,300	24,200	26,700	22,400	300	19,600	700
Self employed.....	200	600	200	500	200	1,600	S
Educ inst, total....	13,400	500	2,100	100	100	3,100	S
4-yr college/univ.	500	500	1,900	100	S	1,800	S
Other.....	12,900	S	200	S	100	1,300	S
Nonprofit orgs.....	4,500	200	900	200	600	3,600	S
Federal Government..	100	1,600	1,800	700	S	1,800	S
State/local govt....	1,000	2,200	2,100	300	300	3,300	S
Other.....	2,400	2,600	1,800	1,100	2,300	8,000	100
No report.....	100	S	S	S	S	S	800
Total sciences.....	23,700	17,700	29,400	23,000	3,700	32,400	1,300
Business and Industry.....	3,200	13,100	21,800	20,800	500	15,400	500
Industry.....	3,000	12,700	21,500	20,300	300	13,900	500
Self employed.....	200	400	200	500	200	1,400	S
Educ inst, total....	13,000	400	2,000	S	100	3,000	S
4-yr college/univ.	500	400	1,800	S	S	1,700	S
Other.....	12,500	S	200	S	100	1,300	S
Nonprofit orgs.....	4,500	200	700	200	600	3,600	S
Federal Government..	100	600	1,600	700	S	1,400	S
State/local govt....	1,000	1,200	1,800	200	300	2,900	S
Other.....	2,000	2,100	1,500	1,100	2,200	6,200	S
No report.....	100	S	S	S	S	S	700
Physical sciences.....	800	1,300	800	900	S	1,000	S
Business and Industry.....	S	1,100	700	800	S	700	S
Industry.....	S	1,100	700	800	S	600	S
Self employed.....	S	S	S	S	S	100	S
Educ inst, total....	700	S	S	S	S	100	S
4-yr college/univ.	100	S	S	S	S	S	S
Other.....	700	S	S	S	S	100	S
Nonprofit orgs.....	S	S	S	S	S	100	S
Federal Government..	S	S	S	S	S	100	S
State/local govt....	S	100	S	S	S	S	S
Other.....	100	100	S	S	S	100	S
No report.....	S	S	S	S	S	S	S
Math/statistics.....	3,800	900	3,400	1,400	S	1,900	100
Business and Industry.....	300	700	2,700	1,300	S	1,200	100
Industry.....	300	700	2,700	1,300	S	1,200	100
Self employed.....	S	S	S	S	S	S	S
Educ inst, total....	3,300	S	100	S	S	200	S
4-yr college/univ.	100	S	100	S	S	200	S
Other.....	3,200	S	S	S	S	S	S
Nonprofit orgs.....	100	S	S	S	S	100	S
Federal Government..	S	S	100	S	S	S	S
State/local govt....	S	100	100	S	S	S	S
Other.....	S	100	500	100	S	500	S
No report.....	100	S	S	S	S	S	S
Computer science.....	700	2,300	14,900	700	100	3,400	300
Business and Industry.....	100	1,800	12,300	600	S	3,000	S
Industry.....	100	1,700	12,300	600	S	2,700	S
Self employed.....	S	S	100	S	S	300	S
Educ inst, total....	400	300	1,100	S	S	S	S
4-yr college/univ.	S	300	900	S	S	S	S
Other.....	400	S	200	S	S	S	S
Nonprofit orgs.....	S	S	100	S	S	S	S
Federal Government..	100	100	400	100	S	100	S
State/local govt....	S	S	400	S	S	100	S
Other.....	100	100	500	S	S	200	S
No report.....	S	S	S	S	S	S	300

See explanatory information and SOURCE at end of table.

Table B-28. 1989 science and engineering bachelor's-degree recipients, by field of degree, type of employer, and primary work activity: 1990

Field of degree and type of employer	Total employed	Primary work activity						
		Research and development				Management/administration		
		Total	Basic	Applied	Develop-ment	Total	Of R&D	Of non-R&D
Environ science	2,200	400	200	200	S	200	S	200
Business and Industry	1,600	300	100	200	S	100	S	100
Industry	1,600	300	100	200	S	100	S	100
Self employed	S	S	S	S	S	S	S	S
Educ inst, total	200	S	S	S	S	S	S	S
4-yr college/univ.	100	S	S	S	S	S	S	S
Other	100	S	S	S	S	S	S	S
Nonprofit orgs	S	S	S	S	S	S	S	S
Federal Government	100	S	S	S	S	S	S	S
State/local govt	S	S	S	S	S	S	S	S
Other	200	S	S	S	S	S	S	S
Life sciences	35,300	8,200	3,000	3,400	1,900	4,100	600	3,500
Business and Industry	16,500	3,600	300	1,700	1,700	2,100	300	1,800
Industry	15,400	3,600	300	1,700	1,700	2,000	200	1,700
Self employed	1,100	S	S	S	S	200	100	100
Educ inst, total	6,100	1,900	1,200	700	S	100	S	S
4-yr college/univ.	2,400	1,000	800	200	S	S	S	S
Other	3,700	1,000	500	500	S	S	S	S
Nonprofit orgs	1,700	500	400	S	S	100	S	100
Federal Government	1,400	600	200	400	S	100	S	100
State/local govt	3,000	800	500	200	100	200	S	200
Other	6,600	800	300	500	S	1,400	200	1,200
Psychology	32,300	2,500	400	1,600	600	5,000	800	4,300
Business and Industry	13,200	600	S	200	400	2,900	200	2,700
Industry	12,900	600	S	200	400	2,700	200	2,500
Self employed	400	S	S	S	S	200	S	200
Educ inst, total	4,000	400	S	400	S	600	200	400
4-yr college/univ.	800	200	S	200	S	400	S	400
Other	3,200	200	S	200	S	200	200	S
Nonprofit orgs	6,800	700	200	400	200	400	S	400
Federal Government	800	S	S	S	S	S	S	S
State/local govt	2,900	500	200	300	S	600	200	400
Other	4,500	400	S	400	S	600	200	400
No report	200	S	S	S	S	S	S	S
Social sciences	60,000	3,300	300	2,800	200	13,300	2,300	11,100
Business and Industry	36,700	1,300	200	1,100	S	9,300	1,500	7,800
Industry	34,900	1,300	200	1,100	S	8,700	1,500	7,300
Self employed	1,800	S	S	S	S	500	S	500
Educ inst, total	5,400	200	S	200	S	200	S	200
4-yr college/univ.	1,200	200	S	200	S	S	S	S
Other	4,200	S	S	S	S	200	S	200
Nonprofit orgs	3,400	S	S	S	S	1,000	200	800
Federal Government	3,000	800	S	800	S	300	200	100
State/local govt	4,600	600	S	400	200	1,300	200	1,000
Other	6,700	500	100	400	S	1,300	200	1,100
No report	200	S	S	S	S	S	S	S
Total engineering	62,700	22,900	400	2,100	20,300	6,700	1,500	5,200
Business and Industry	49,200	19,400	300	1,200	17,900	4,500	1,100	3,300
Industry	48,400	19,200	300	1,200	17,700	4,200	1,100	3,100
Self employed	900	200	S	S	200	300	100	200
Educ inst, total	1,800	900	100	400	400	100	S	100
4-yr college/univ.	1,200	700	S	300	300	100	S	100
Other	600	200	S	100	100	S	S	S
Nonprofit orgs	400	100	S	S	100	100	S	100
Federal Government	3,800	1,700	S	300	1,400	500	200	300
State/local govt	2,600	400	S	100	300	400	S	400
Other	4,700	500	S	200	200	1,100	100	1,000
No report	200	S	S	S	S	S	S	S

See explanatory information and SOURCE at end of table.

Table B-28. 1989 science and engineering bachelor's-degree recipients, by field of degree, type of employer, and primary work activity: 1990

Field of degree and type of employer	Primary work activity						
	Teaching	Production/ inspection	Reporting/ stat work/ computing	Sales	Profes- sional services	Other	No report
Environ science.....	200	500	300	100	S	500	S
Business and Industry.....	S	500	200	100	S	300	S
Industry.....	S	400	200	100	S	300	S
Self employed.....	S	S	S	S	S	S	S
Educ inst, total....	100	100	S	S	S	S	S
4-yr college/univ.	S	100	S	S	S	S	S
Other.....	100	S	S	S	S	S	S
Nonprofit orgs.....	S	S	S	S	S	S	S
Federal Government..	S	S	S	S	S	S	S
State/local govt....	S	S	S	S	S	S	S
Other.....	S	S	S	S	S	100	S
Life sciences.....	4,200	7,400	1,200	2,300	1,200	6,400	300
Business and Industry.....	200	5,100	400	1,800	500	2,500	300
Industry.....	200	4,700	400	1,700	300	2,200	300
Self employed.....	S	300	S	S	200	300	S
Educ inst, total....	2,900	100	300	S	100	800	S
4-yr college/univ.	300	100	300	S	S	800	S
Other.....	2,600	S	S	S	100	S	S
Nonprofit orgs.....	200	100	200	S	S	600	S
Federal Government..	S	300	100	100	S	200	S
State/local govt....	300	800	200	S	S	600	S
Other.....	600	1,000	S	400	700	1,700	S
Psychology.....	7,800	1,100	1,500	4,700	1,500	7,900	200
Business and Industry.....	1,700	800	600	3,900	S	2,800	S
Industry.....	1,700	800	600	3,900	S	2,600	S
Self employed.....	S	S	S	S	S	200	S
Educ inst, total....	2,000	S	S	S	S	900	S
4-yr college/univ.	S	S	S	S	S	200	S
Other.....	2,000	S	S	S	S	700	S
Nonprofit orgs.....	3,000	S	200	200	400	1,900	S
Federal Government..	S	200	200	200	S	200	S
State/local govt....	300	S	600	200	100	800	S
Other.....	800	200	S	200	1,000	1,300	S
No report.....	S	S	S	S	S	S	200
Social sciences.....	6,300	4,200	7,400	12,900	900	11,200	400
Business and Industry.....	800	3,200	4,900	12,100	S	4,900	200
Industry.....	600	3,200	4,700	11,800	S	4,300	200
Self employed.....	200	S	200	400	S	600	S
Educ inst, total....	3,500	S	500	S	S	900	S
4-yr college/univ.	S	S	500	S	S	500	S
Other.....	3,500	S	S	S	S	400	S
Nonprofit orgs.....	1,200	S	200	S	200	800	S
Federal Government..	S	S	800	400	S	800	S
State/local govt....	400	200	600	S	200	1,400	S
Other.....	400	700	400	400	500	2,400	S
No report.....	S	S	S	S	S	S	200
Total engineering.....	1,200	14,200	6,200	2,300	100	8,800	400
Business and Industry.....	300	11,700	5,100	2,100	S	5,900	200
Industry.....	300	11,500	5,100	2,100	S	5,700	200
Self employed.....	S	200	S	S	S	200	S
Educ inst, total....	400	100	100	100	S	100	S
4-yr college/univ.	S	100	100	100	S	100	S
Other.....	400	S	S	S	S	S	S
Nonprofit orgs.....	S	S	100	S	S	100	S
Federal Government..	S	1,000	200	S	S	500	S
State/local govt....	100	900	300	100	S	400	S
Other.....	400	400	300	S	100	1,800	100
No report.....	S	S	S	S	S	S	100

KEY: S = Data suppressed for statistical reasons

NOTES: Because of rounding, components may not add to totals.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-29. 1989 science and engineering (S&E) bachelor's-degree recipients, by field of degree and field of employment: 1990

Field of degree	Total employed	Employed in non S&E occupation	Employed in S&E occupation	S&E field of employment				
				Chemistry	Physics/ astronomy	Other physical sciences	Math/ stat	Computer science
Total, all fields.....	244,700	105,900	138,800	3,400	200	1,000	9,800	36,600
Total sciences.....	182,000	97,000	85,000	3,200	200	1,000	8,000	31,500
Physical sciences.....	7,900	2,600	5,300	2,200	200	300	200	700
Chemistry.....	4,500	1,100	3,300	2,100	S	200	100	100
Physics/astronomy.....	2,500	800	1,700	100	200	S	100	600
Other phys sciences...	900	600	200	S	S	S	S	S
Math/statistics.....	13,400	4,900	8,500	S	S	S	5,100	2,300
Computer science.....	31,000	4,000	27,000	S	S	S	100	25,400
Environ science.....	2,200	400	1,800	100	S	S	S	100
Life sciences.....	35,300	16,700	18,600	1,000	S	600	700	800
Biology.....	23,100	11,300	11,800	900	S	400	600	400
Agr science.....	12,200	5,400	6,800	S	S	200	100	400
Psychology.....	32,300	23,700	8,600	S	S	S	600	200
Social sciences.....	60,000	44,800	15,200	S	S	S	1,300	2,000
Economics.....	20,100	14,200	5,900	S	S	S	800	1,100
Socio/anthro.....	14,000	11,200	2,700	S	S	S	200	300
Other soc sciences....	25,900	19,400	6,500	S	S	S	200	500
Total engineering.....	62,700	8,900	53,800	200	S	S	1,800	5,200
Aero/astro.....	2,900	600	2,300	S	S	S	100	300
Chemical.....	3,000	300	2,700	100	S	S	S	S
Civil.....	6,400	800	5,700	S	S	S	100	100
Elect/electron.....	24,200	2,700	21,500	100	S	S	700	3,400
Industrial.....	4,900	1,000	3,900	S	S	S	300	400
Materials.....	600	100	500	S	S	S	S	S
Mechanical.....	13,100	1,900	11,200	S	S	S	400	200
Mining.....	300	S	200	S	S	S	S	S
Nuclear.....	400	100	300	S	S	S	S	S
Petroleum.....	400	S	400	S	S	S	S	S
Other engineering.....	6,500	1,400	5,100	S	S	S	200	700

Field of degree	S&E field of employment							
	Environ science	Biology	Agric science	Psychology	Economics	Sociology anthro-pology	Other social sciences	Engineering
Total, all fields.....	1,800	10,400	5,900	4,000	3,500	3,300	6,700	52,300
Total sciences.....	1,800	10,300	5,300	4,000	3,500	3,200	6,600	6,500
Physical sciences.....	100	500	S	S	S	S	100	1,000
Chemistry.....	S	500	S	S	S	S	S	300
Physics/astronomy.....	S	S	S	S	S	S	S	600
Other phys sciences...	S	S	S	S	S	S	S	100
Math/statistics.....	S	100	100	S	100	100	100	700
Computer science.....	S	100	S	S	S	S	S	1,300
Environ science.....	1,300	100	100	S	S	S	S	200
Life sciences.....	200	8,600	4,500	200	200	200	100	1,500
Biology.....	200	8,100	400	S	200	200	S	200
Agr science.....	S	500	4,000	200	S	S	100	1,300
Psychology.....	200	900	400	3,600	S	1,000	1,100	600
Social sciences.....	S	S	200	200	3,200	1,900	5,200	1,300
Economics.....	S	S	S	S	3,000	S	1,000	S
Socio/anthro.....	S	S	S	200	200	600	600	600
Other soc sciences....	S	S	200	S	S	1,300	3,600	600
Total engineering.....	S	100	600	S	S	100	S	45,900
Aero/astro.....	S	S	S	S	S	S	S	1,900
Chemical.....	S	S	100	S	S	S	S	2,500
Civil.....	S	S	100	S	S	S	S	5,400
Elect/electron.....	S	S	300	S	S	100	S	17,000
Industrial.....	S	S	100	S	S	S	S	3,200
Materials.....	S	S	S	S	S	S	S	500
Mechanical.....	S	S	S	S	S	S	S	10,500
Mining.....	S	S	S	S	S	S	S	200
Nuclear.....	S	S	S	S	S	S	S	200
Petroleum.....	S	S	S	S	S	S	S	300
Other engineering.....	S	100	100	S	S	S	S	4,100

KEY: S = Data suppressed for statistical reasons

NOTES: Because of rounding, components may not add to totals.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table 8-30. 1989 science and engineering (S&E) bachelor's-degree recipients employed in S&E occupations, by field of degree, type of employer, and primary work activity: 1990

Field of degree	Employed in S&E occupation	Primary work activity						
		Research and development				Management/administration		
		Total	Basic	Applied	Develop-ment	Total	Of R&D	Of non-R&D
Total, all fields	138,800	41,200	4,600	8,400	28,300	12,000	3,600	8,300
Business and Industry	95,500	30,800	1,000	4,300	25,500	7,500	2,500	5,100
Industry	93,500	30,500	1,000	4,300	25,200	7,200	2,300	4,900
Self employed	2,000	300	S	S	300	300	100	200
Educ inst, total	12,600	3,200	1,600	1,100	500	400	300	100
4-yr college/univ.	4,600	2,100	1,000	700	400	200	100	100
Other	8,000	1,000	500	400	100	200	200	S
Nonprofit orgs	5,800	800	600	100	100	400	S	400
Federal Government	7,700	2,800	300	1,200	1,300	800	300	500
State/local govt	8,400	1,900	600	700	600	1,600	200	1,300
Other	8,800	1,700	500	1,000	200	1,300	400	1,000
No report	100	S	S	S	S	S	S	S
Total sciences	85,000	19,900	4,200	6,400	9,300	6,800	2,300	4,500
Business and Industry	52,000	12,500	700	3,200	8,600	4,100	1,300	2,800
Industry	50,600	12,300	700	3,200	8,500	3,900	1,300	2,600
Self employed	1,300	100	S	S	100	200	100	200
Educ inst, total	11,200	2,400	1,500	800	100	300	300	S
4-yr college/univ.	3,600	1,500	1,000	400	100	100	100	S
Other	7,600	900	500	400	S	200	200	S
Nonprofit orgs	5,500	700	600	100	S	300	S	300
Federal Government	4,400	1,300	300	900	200	400	200	200
State/local govt	6,100	1,500	600	700	300	1,100	200	900
Other	5,800	1,400	500	800	100	500	200	300
No report	100	S	S	S	S	S	S	S
Physical sciences	5,300	2,300	500	800	900	300	100	200
Business and Industry	3,700	1,400	S	500	800	200	100	100
Industry	3,700	1,400	S	500	800	200	100	100
Self employed	S	S	S	S	S	S	S	S
Educ inst, total	600	400	200	200	S	S	S	S
4-yr college/univ.	300	200	200	S	S	S	S	S
Other	300	200	S	200	S	S	S	S
Nonprofit orgs	100	S	S	S	S	S	S	S
Federal Government	300	100	S	100	S	S	S	S
State/local govt	200	100	S	S	S	S	S	S
Other	400	200	200	S	S	100	S	100
No report	S	S	S	S	S	S	S	S
Math/statistics	8,500	700	100	200	400	200	100	100
Business and Industry	4,700	500	S	100	400	100	100	100
Industry	4,700	400	S	100	300	100	100	100
Self employed	100	100	S	S	100	S	S	S
Educ inst, total	2,900	100	100	S	S	S	S	S
4-yr college/univ.	300	100	100	S	S	S	S	S
Other	2,600	S	S	S	S	S	S	S
Nonprofit orgs	200	100	S	100	S	S	S	S
Federal Government	100	100	S	100	S	S	S	S
State/local govt	100	S	S	S	S	S	S	S
Other	500	S	S	S	S	S	S	S
No report	100	S	S	S	S	S	S	S
Computer science	27,000	6,500	200	300	6,000	1,300	400	900
Business and Industry	23,000	6,200	100	200	5,800	1,000	400	600
Industry	22,500	6,100	100	200	5,800	900	300	600
Self employed	500	100	S	S	100	100	S	100
Educ inst, total	1,700	100	S	100	S	S	S	S
4-yr college/univ.	1,400	100	S	100	S	S	S	S
Other	300	S	S	S	S	S	S	S
Nonprofit orgs	200	S	S	S	S	S	S	S
Federal Government	800	200	S	S	100	S	S	S
State/local govt	600	S	S	S	S	S	S	S
Other	800	S	S	S	S	100	S	100

See explanatory information and SOURCE at end of table.

Table B-30. 1989 science and engineering (S&E) bachelor's-degree recipients employed in S&E occupations, by field of degree, type of employer, and primary work activity: 1990

Field of degree	Primary work activity						
	Teaching	Production/ inspection	Reporting/ stat work/ computing	Sales	Profes- sional services	Other	No report
Total, all fields	10,800	23,600	27,900	5,700	300	17,100	100
Business and Industry	900	18,700	21,800	5,300	100	10,300	100
Industry	500	18,100	21,700	5,100	100	9,900	100
Self employed	S	600	100	200	S	500	S
Educ inst, total	6,700	500	1,600	S	S	200	S
4-yr college/univ.	200	500	1,400	S	S	200	S
Other	6,600	S	200	S	S	S	S
Nonprofit orgs	2,100	100	600	S	S	1,700	S
Federal Government	100	1,300	1,500	200	S	1,000	S
State/local govt	100	1,600	1,200	200	S	1,800	S
Other	800	1,400	1,200	S	200	2,100	S
No report	100	S	S	S	S	S	S
Total sciences	10,100	10,900	22,300	4,500	300	10,300	S
Business and Industry	700	8,200	17,000	4,000	100	5,400	S
Industry	700	7,800	17,000	3,800	100	5,000	S
Self employed	S	400	100	200	S	300	S
Educ inst, total	6,500	400	1,500	S	S	100	S
4-yr college/univ.	200	400	1,400	S	S	100	S
Other	6,300	S	200	S	S	S	S
Nonprofit orgs	2,100	100	500	S	S	1,700	S
Federal Government	100	400	1,300	200	S	500	S
State/local govt	100	700	1,000	200	S	1,400	S
Other	600	1,000	1,000	S	200	1,000	S
No report	100	S	S	S	S	S	S
Physical sciences	200	1,100	600	200	S	500	S
Business and Industry	S	900	600	200	S	400	S
Industry	S	900	600	200	S	400	S
Self employed	S	S	S	S	S	S	S
Educ inst, total	200	S	S	S	S	S	S
4-yr college/univ.	100	S	S	S	S	S	S
Other	100	S	S	S	S	S	S
Nonprofit orgs	S	S	S	S	S	S	S
Federal Government	S	S	S	S	S	100	S
State/local govt	S	100	S	S	S	S	S
Other	S	100	S	S	S	S	S
No report	S	S	S	S	S	S	S
Math/statistics	2,900	600	3,100	400	S	700	S
Business and Industry	100	600	2,600	400	S	500	S
Industry	100	600	2,600	400	S	500	S
Self employed	S	S	S	S	S	S	S
Educ inst, total	2,600	S	100	S	S	100	S
4-yr college/univ.	100	S	100	S	S	100	S
Other	2,500	S	S	S	S	S	S
Nonprofit orgs	S	S	S	S	S	100	S
Federal Government	S	S	100	S	S	S	S
State/local govt	S	S	S	S	S	S	S
Other	S	S	400	S	S	100	S
No report	100	S	S	S	S	S	S
Computer science	300	2,100	14,400	200	100	2,200	S
Business and Industry	100	1,600	11,900	200	S	2,000	S
Industry	100	1,600	11,800	200	S	1,800	S
Self employed	S	S	100	S	S	300	S
Educ inst, total	100	300	1,100	S	S	S	S
4-yr college/univ.	S	300	900	S	S	S	S
Other	100	S	200	S	S	S	S
Nonprofit orgs	S	S	100	S	S	S	S
Federal Government	100	100	300	S	S	100	S
State/local govt	S	S	400	S	S	S	S
Other	S	100	500	S	S	S	S

See explanatory information and SOURCE at end of table.

Table B-30. 1989 science and engineering (S&E) bachelor's-degree recipients employed in S&E occupations, by field of degree, type of employer, and primary work activity: 1990

Field of degree	Employed in S&E occupation	Primary work activity						
		Research and development				Management/administration		
		Total	Basic	Applied	Develop-ment	Total	Of R&D	Of non-R&D
Environ science	1,800	400	200	200	S	200	S	100
Business and Industry	1,400	300	100	200	S	100	S	100
Industry	1,300	300	100	200	S	100	S	100
Self employed	S	S	S	S	S	S	S	S
Educ inst, total	200	S	S	S	S	S	S	S
4-yr college/univ.	100	S	S	S	S	S	S	S
Other	100	S	S	S	S	S	S	S
Nonprofit orgs	S	S	S	S	S	S	S	S
Federal Government	100	S	S	S	S	S	S	S
State/local govt	S	S	S	S	S	S	S	S
Other	100	S	S	S	S	S	S	S
Life sciences	18,600	7,000	2,900	2,600	1,500	1,600	300	1,200
Business and Industry	9,500	3,200	300	1,600	1,300	1,100	300	900
Industry	9,000	3,200	300	1,600	1,300	1,000	200	800
Self employed	500	S	S	S	S	100	S	100
Educ inst, total	3,700	1,600	1,200	400	S	100	S	S
4-yr college/univ.	1,000	900	700	100	S	S	S	S
Other	2,700	700	500	200	S	S	S	S
Nonprofit orgs	1,200	500	400	S	S	100	S	100
Federal Government	1,300	600	200	300	S	100	S	100
State/local govt	1,700	800	500	200	100	100	S	100
Other	1,200	400	300	100	S	100	S	100
Psychology	8,600	1,100	200	800	200	600	200	400
Business and Industry	2,500	400	S	200	200	200	S	200
Industry	2,500	400	S	200	200	200	S	200
Educ inst, total	400	S	S	S	S	200	200	S
Other	400	S	S	S	S	200	200	S
Nonprofit orgs	3,500	200	200	S	S	200	S	200
Federal Government	200	S	S	S	S	S	S	S
State/local govt	700	200	S	200	S	S	S	S
Other	1,200	400	S	400	S	S	S	S
Social sciences	15,200	1,800	200	1,500	200	2,800	1,200	1,600
Business and Industry	7,100	500	200	300	S	1,300	600	700
Industry	7,000	500	200	300	S	1,300	600	700
Self employed	200	S	S	S	S	S	S	S
Educ inst, total	1,800	200	S	200	S	S	S	S
4-yr college/univ.	500	200	S	200	S	S	S	S
Other	1,300	S	S	S	S	S	S	S
Nonprofit orgs	400	S	S	S	S	S	S	S
Federal Government	1,700	400	S	400	S	300	200	100
State/local govt	2,700	400	S	200	200	1,000	200	800
Other	1,500	400	S	400	S	200	200	S
Total engineering	53,800	21,300	400	1,900	19,000	5,200	1,400	3,800
Business and Industry	43,500	18,300	300	1,200	16,900	3,400	1,100	2,300
Industry	42,900	18,200	300	1,100	16,700	3,400	1,100	2,300
Self employed	600	200	S	S	200	100	100	S
Educ inst, total	1,300	800	100	300	400	100	S	100
4-yr college/univ.	900	600	S	300	300	100	S	100
Other	400	100	S	S	100	S	S	S
Nonprofit orgs	300	100	S	S	100	100	S	100
Federal Government	3,300	1,500	S	300	1,200	400	100	300
State/local govt	2,300	400	S	100	300	400	S	400
Other	3,000	300	S	200	200	800	100	700

See explanatory information and SOURCE at end of table.

Table B-30. 1989 science and engineering (S&E) bachelor's-degree recipients employed in S&E occupations, by field of degree, type of employer, and primary work activity: 1990

Field of degree	Primary work activity						
	Teaching	Production/ inspection	Reporting/ stat work/ computing	Sales	Profes- sional services	Other	No report
Environ science	100	500	200	S	S	400	S
Business and Industry	S	400	100	S	S	300	S
Industry	S	400	100	S	S	300	S
Self employed	S	S	S	S	S	S	S
Educ inst, total	100	100	S	S	S	S	S
4-yr college/univ.	S	100	S	S	S	S	S
Other	100	S	S	S	S	S	S
Nonprofit orgs	S	S	S	S	S	S	S
Federal Government	S	S	S	S	S	S	S
State/local govt	S	S	S	S	S	S	S
Other	S	S	S	S	S	S	S
Life sciences	2,400	4,800	300	700	100	1,800	S
Business and Industry	S	3,500	200	600	S	700	S
Industry	S	3,200	200	600	S	700	S
Self employed	S	300	S	S	S	S	S
Educ inst, total	2,000	S	S	S	S	S	S
4-yr college/univ.	S	S	S	S	S	S	S
Other	1,900	S	S	S	S	S	S
Nonprofit orgs	200	100	S	S	S	300	S
Federal Government	S	300	100	100	S	100	S
State/local govt	S	600	S	S	S	300	S
Other	200	300	S	S	S	300	S
Psychology	2,800	400	800	800	100	2,100	S
Business and Industry	400	400	200	600	S	400	S
Industry	400	400	200	600	S	400	S
Educ inst, total	200	S	S	S	S	S	S
Other	200	S	S	S	S	S	S
Nonprofit orgs	1,900	S	200	S	S	1,100	S
Federal Government	S	S	200	S	S	S	S
State/local govt	S	S	200	200	S	200	S
Other	400	S	S	S	100	400	S
Social sciences	1,300	1,500	2,800	2,200	100	2,600	S
Business and Industry	S	900	1,500	2,000	S	1,000	S
Industry	S	900	1,500	1,900	S	1,000	S
Self employed	S	S	S	200	S	S	S
Educ inst, total	1,300	S	300	S	S	S	S
4-yr college/univ.	S	S	300	S	S	S	S
Other	1,300	S	S	S	S	S	S
Nonprofit orgs	S	S	200	S	S	200	S
Federal Government	S	S	600	200	S	200	S
State/local govt	S	S	300	S	S	1,000	S
Other	S	600	S	S	100	200	S
Total engineering	700	12,700	5,600	1,300	c	6,900	100
Business and Industry	200	10,500	4,700	1,300	S	5,000	100
Industry	200	10,200	4,700	1,300	S	4,800	100
Self employed	S	200	S	S	S	200	S
Educ inst, total	300	100	100	S	S	S	S
4-yr college/univ.	S	100	100	S	S	S	S
Other	300	S	S	S	S	S	S
Nonprofit orgs	S	S	100	S	S	S	S
Federal Government	S	800	200	S	S	500	S
State/local govt	S	900	300	S	S	300	S
Other	300	400	200	S	S	1,000	S

KEY: S = Data suppressed for statistical reasons

NOTES: Because of rounding, components may not add to totals.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-31. 1989 science and engineering master's-degree recipients, by field of degree, sex, and graduate school status: 1990

Field of degree and sex	Total	Graduate school status				
		Full-time student	Part-time student	Nonstudent	Other	No report
Total, all fields	70,400	16,200	4,900	49,000	200	S
Men	48,300	11,000	3,500	33,500	200	S
Women	22,100	5,200	1,400	15,500	100	S
Total sciences	48,400	12,400	3,200	32,700	100	S
Men	29,600	7,700	2,000	19,800	100	S
Women	18,800	4,700	1,200	12,900	S	S
Physical sciences	4,600	2,000	300	2,300	S	S
Men	3,400	1,700	200	1,400	S	S
Women	1,200	400	S	800	S	S
Chemistry	1,600	700	S	900	S	S
Men	1,000	500	S	500	S	S
Women	600	200	S	400	S	S
Physics/astronomy	2,000	1,200	200	600	S	S
Men	1,800	1,000	200	600	S	S
Women	200	100	S	100	S	S
Other phys sciences	900	100	S	800	S	S
Men	500	100	S	400	S	S
Women	400	S	S	400	S	S
Math/statistics	5,100	1,100	400	3,600	S	S
Men	3,400	900	200	2,300	S	S
Women	1,700	200	200	1,300	S	S
Computer science	11,300	800	800	9,600	S	S
Men	8,200	600	700	6,900	S	S
Women	3,100	200	200	2,700	S	S
Environ science	2,500	500	200	1,800	S	S
Men	1,700	300	100	1,200	S	S
Women	800	200	S	600	S	S
Life sciences	9,700	3,100	400	6,100	S	S
Men	5,700	2,200	100	3,500	S	S
Women	3,900	1,000	300	2,700	S	S
Biology	6,100	2,200	100	3,800	S	S
Men	3,600	1,600	100	1,900	S	S
Women	2,500	500	S	1,900	S	S
Agr science	3,600	1,000	300	2,300	S	S
Men	2,100	500	S	1,600	S	S
Women	1,500	400	300	800	S	S
Psychology	4,300	1,800	300	2,200	S	S
Men	1,300	200	S	1,000	S	S
Women	3,000	1,500	300	1,200	S	S
Social sciences	10,900	3,000	800	7,100	S	S
Men	6,000	1,700	600	3,600	S	S
Women	5,000	1,300	200	3,500	S	S
Economics	2,800	700	400	1,700	S	S
Men	1,900	500	300	1,000	S	S
Women	900	200	100	600	S	S
Socio/anthro	2,000	600	100	1,300	S	S
Men	1,000	200	100	800	S	S
Women	1,000	400	S	500	S	S
Other soc sciences	6,200	1,700	400	4,100	S	S
Men	3,000	1,000	200	1,800	S	S
Women	3,100	700	100	2,300	S	S

See explanatory information and SOURCE at end of table.

Table B-31. 1989 science and engineering master's-degree recipients, by field of degree, sex, and graduate school status: 1990

Field of degree and sex	Total	Graduate school status				
		Full-time student	Part-time student	Nonstudent	Other	No report
Total engineering	22,000	3,800	1,700	16,300	100	S
Men	18,700	3,300	1,500	13,700	100	S
Women	3,300	500	200	2,600	S	S
Aero/astro	1,000	200	100	700	S	S
Men	1,000	200	100	700	S	S
Chemical	1,000	300	S	600	S	S
Men	700	300	S	400	S	S
Women	300	100	S	200	S	S
Civil	2,600	300	100	2,200	S	S
Men	2,200	200	100	1,900	S	S
Women	400	S	100	300	S	S
Elect/electron	7,200	1,400	1,000	4,800	100	S
Men	6,200	1,200	900	4,000	100	S
Women	1,000	200	100	800	S	S
Industrial	1,200	200	100	1,000	S	S
Men	900	100	100	800	S	S
Women	300	100	S	200	S	S
Materials	900	300	100	500	S	S
Men	700	300	S	400	S	S
Women	200	S	S	100	S	S
Mechanical	3,800	500	300	3,000	S	S
Men	3,600	500	300	2,900	S	S
Women	200	100	S	100	S	S
Mining	200	S	S	200	S	S
Men	200	S	S	200	S	S
Women	S	S	S	S	S	S
Nuclear	200	100	S	100	S	S
Men	200	100	S	100	S	S
Women	S	S	S	S	S	S
Petroleum	200	S	S	100	S	S
Men	200	S	S	100	S	S
Women	S	S	S	S	S	S
Other engineering	3,600	500	100	3,000	S	S
Men	2,800	400	100	2,300	S	S
Women	900	S	S	800	S	S

KEY: S = Data suppressed for statistical reasons

NOTES: Because of rounding, components may not add to totals.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-32. 1989 science and engineering (S&E) master's-degree recipients, by field of degree, employment status, and sex: 1990

Field of degree	Total population			Total employed			Employed in S&E occupation		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Total, all fields	70,400	48,300	22,100	62,500	43,100	19,300	56,100	39,400	16,600
Total sciences	48,400	29,600	18,800	42,900	26,200	16,600	36,900	23,000	13,800
Physical sciences	4,600	3,400	1,200	3,700	2,600	1,100	3,500	2,600	900
Chemistry	1,600	1,000	600	1,300	800	500	1,200	800	500
Physics/astronomy	2,000	1,800	200	1,500	1,400	200	1,600	1,400	200
Other phys sciences	900	500	400	800	400	400	800	400	300
Math/statistics	5,100	3,400	1,700	4,600	3,000	1,600	4,100	2,700	1,400
Computer science	11,300	8,200	3,100	10,600	7,800	2,800	10,000	7,300	2,700
Environ science	2,500	1,700	800	2,300	1,600	700	2,200	1,500	700
Life sciences	9,700	5,700	3,900	8,100	4,700	3,400	6,900	4,100	2,800
Biology	6,100	3,600	2,500	5,200	2,900	2,200	4,200	2,400	1,800
Agr science	3,600	2,100	1,500	2,900	1,800	1,200	2,700	1,700	900
Psychology	4,300	1,300	3,000	3,700	1,300	2,400	2,800	700	2,100
Social sciences	11,000	6,000	5,000	9,900	5,300	4,600	7,300	4,100	3,200
Economics	2,800	1,900	900	2,400	1,600	800	1,900	1,500	400
Socio/anthro	2,000	1,000	1,000	1,900	1,000	900	1,400	700	700
Other soc sciences	6,200	3,000	3,100	5,700	2,800	2,900	4,000	1,900	2,200
Total engineering	22,000	18,700	3,300	19,600	16,800	2,800	19,200	16,400	2,800
Aero/astro	1,000	1,000	S	900	900	S	900	900	S
Chemical	1,000	700	300	800	600	300	800	600	300
Civil	2,600	2,200	400	2,400	2,100	300	2,400	2,000	300
Elect/electron	7,200	6,200	1,000	6,400	5,600	800	6,200	5,500	700
Industrial	1,200	900	300	1,100	900	300	1,000	700	300
Materials	900	700	200	700	500	200	700	600	200
Mechanical	3,800	3,600	200	3,600	3,400	200	3,400	3,200	200
Mining	200	200	S	200	200	S	200	200	S
Nuclear	200	200	S	200	100	S	200	200	S
Petroleum	200	200	S	100	100	S	200	100	S
Other engineering	3,600	2,800	900	3,200	2,400	800	3,200	2,400	800

See explanatory information and SOURCE at end of table.

Table B-32. 1989 science and engineering (S&E) master's-degree recipients, by field of degree, employment status, and sex: 1990

Field of degree	Unemployed			Outside labor force		
	Total	Men	Women	Total	Men	Women
Total, all fields	1,300	800	600	6,600	4,400	2,200
Total sciences	900	500	500	4,700	2,900	1,800
Physical sciences	100	100	S	800	700	100
Chemistry	S	S	S	300	200	100
Physics/astronomy	S	S	S	500	400	S
Other phys sciences	S	S	S	100	100	S
Math/statistics	100	100	S	400	300	100
Computer science	200	100	100	600	300	300
Environ science	100	S	S	200	100	100
Life sciences	200	100	100	1,400	1,000	400
Biology	100	S	100	900	700	100
Agr science	100	S	100	500	300	200
Psychology	100	S	100	500	S	500
Social sciences	200	100	100	900	500	300
Economics		S	S	400	300	100
Socio/anthro	S	S	S	100	S	100
Other soc sciences	200	S	100	400	200	100
Total engineering	400	300	100	1,900	1,600	400
Aero/astro	S	S	S	100	100	S
Chemical	S	S	S	200	100	S
Civil	S	S	S	200	100	S
Elect/electron	100	S	100	700	500	200
Industrial	100	S	S	S	S	S
Materials	S	S	S	100	100	S
Mechanical	100	100	S	200	200	S
Mining	S	S	S	S	S	S
Nuclear	S	S	S	S	S	S
Petroleum	S	S	S	S	S	S
Other engineering	100	100	S	300	300	S

KEY: S = Data suppressed for statistical reasons

NOTES: Because of rounding, components may not add to totals.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-33. 1989 science and engineering (S&E) master's-degree recipients, by field of degree, employment status, and racial/ethnic group: 1990

Field of degree	Total population						Total employed					
	Total	White	Black	Asian	Native American	Hispanic 1/	Total	White	Black	Asian	Native American	Hispanic 1/
Total, all fields	70,400	52,400	2,700	9,000	400	2,400	62,500	47,300	2,400	7,100	400	2,000
Total sciences	48,400	36,900	2,200	5,200	300	1,400	42,900	33,100	1,900	4,000	300	1,200
Physical sciences	4,600	3,400	200	600	S	100	3,700	2,800	100	400	S	100
Chemistry	1,600	1,100	100	300	S	100	1,300	900	S	200	S	100
Physics/astronomy	2,000	1,500	S	300	S	100	1,500	1,200	S	200	S	S
Other phys sciences	900	700	100	S	S	S	800	700	100	S	S	S
Math/statistics	5,100	4,000	100	600	S	100	4,600	3,800	100	400	S	100
Computer science	11,300	7,800	400	2,100	S	400	10,600	7,500	200	1,900	S	300
Environ science	2,500	2,200	S	100	S	100	2,300	2,000	S	100	S	100
Life sciences	9,700	7,700		1,000	S	300	8,100	6,600	100	700	S	300
Biology	6,100	4,900	S	600	S	200	5,200	4,200	S	400	S	200
Agr science	3,600	2,800	100	400	S	100	2,900	2,400	100	300	S	100
Psychology	4,300	3,500	400	100	S	100	3,700	2,900	300	100	S	100
Social sciences	11,000	8,300	1,000	600	200	200	9,900	7,600	1,000	300	200	200
Economics	2,800	1,800	400	300	S	100	2,400	1,700	400	200	S	S
Socio/anthro	2,000	1,300	400	S	200	S	1,900	1,100	400	S	200	S
Other soc sciences	6,200	5,200	200	200	S	100	5,700	4,800	200	100	S	100
Total engineering	22,000	15,500	500	3,900	200	1,100	19,600	14,200	400	3,100	200	800
Aero/astro	1,000	800	S	100	S	100	900	700	S	100	S	100
Chemical	1,000	700	S	200	S	100	800	600	S	100	S	100
Civil	2,600	1,600	200	500	S	100	2,400	1,500	200	500	S	100
Elect/electron	7,200	4,700	100	1,600	100	400	6,400	4,200	100	1,300	100	200
Industrial	1,200	800	100	200	S	100	1,100	800	100	200	S	100
Materials	900	600	S	100	S	S	700	600	S	100	S	S
Mechanical	3,800	3,000	S	500	S	100	3,600	2,900	S	400	S	S
Mining	200	200	S	S	S	S	200	200	S	S	S	S
Nuclear	200	200	S	S	S	S	200	100	S	S	S	S
Petroleum	200	100	S	S	S	S	100	100	S	S	S	S
Other engineering	3,600	2,800	100	500	S	200	3,200	2,500	100	300	S	200

Field of degree	Employed in S&E occupation						Unemployed					
	Total	White	Black	Asian	Native American	Hispanic 1/	Total	White	Black	Asian	Native American	Hispanic 1/
Total, all fields	56,100	42,600	1,800	6,700	400	1,800	1,300	700	100	400	S	200
Total sciences	36,900	28,700	1,500	3,700	300	1,000	900	500	100	200	S	S
Physical sciences	3,500	2,700	200	400	S	100	100	100	S	S	S	S
Chemistry	1,200	800	S	200	S	100	S	S	S	S	S	S
Physics/astronomy	1,600	1,200	S	200	S	S	S	S	S	S	S	S
Other phys sciences	800	600	100	S	S	S	S	S	S	S	S	S
Math/statistics	4,100	3,300	100	400	S	100	100	100	S	S	S	S
Computer science	10,000	6,900	300	1,900	S	400	200	S	100	S	S	S
Environ science	2,200	1,900	S	100	S	100	100	100	S	S	S	S
Life sciences	6,900	5,900	100	500	S	200	200	100	S	100	S	S
Biology	4,200	3,600	S	400	S	100	100	100	S	S	S	S
Agr science	2,700	2,300	S	100	S	100	100	S	S	S	S	S
Psychology	2,800	2,400	100	S	S	S	100	S	S	S	S	S
Social sciences	7,300	5,500	700	400	200	S	200	200	S	S	S	S
Economics	1,900	1,100	400	200	S	S	S	S	S	S	S	S
Socio/anthro	1,400	800	300	S	200	S	S	S	S	S	S	S
Other soc sciences	4,000	3,600	100	100	S	S	200	100	S	S	S	S
Total engineering	19,200	14,000	400	3,000	100	800	400	200	S	200	S	200
Aero/astro	900	700	S	100	S	100	S	S	S	S	S	S
Chemical	800	600	S	100	S	100	S	S	S	S	S	S
Civil	2,400	1,500	100	500	S	100	S	S	S	S	S	S
Elect/electron	6,200	4,100	100	1,300	100	200	100	S	S	100	S	100
Industrial	1,000	700	100	100	S	100	100	S	S	S	S	S
Materials	700	600	S	100	S	S	S	S	S	S	S	S
Mechanical	3,400	2,800	S	300	S	100	100	S	S	S	S	S
Mining	200	200	S	S	S	S	S	S	S	S	S	S
Nuclear	200	200	S	S	S	S	S	S	S	S	S	S
Petroleum	200	100	S	S	S	S	S	S	S	S	S	S
Other engineering	3,200	2,600	100	300	S	200	100	100	S	S	S	S

See explanatory information and SOURCE at end of table.

Table B-33. 1989 science and engineering (S&E) master's-degree recipients, by field of degree, employment status, and racial/ethnic group: 1990

Field of degree	Outside labor force					
	Total	White	Black	Asian	Native American	Hispanic 1/
Total, all fields	6,600	4,400	200	1,600	S	300
Total sciences	4,700	3,300	200	1,000	S	200
Physical sciences	800	600	S	200	S	S
Chemistry	300	200	S	S	S	S
Physics/astronomy	500	300	S	200	S	S
Other phys sciences	100	100	S	S	S	S
Math/statistics	400	200	S	100	S	S
Computer science	600	300	100	100	S	S
Environ science	200	100	S	S	S	S
Life sciences	1,400	1,100	S	200	S	S
Biology	900	700	S	200	S	S
Agr science	500	400	S	100	S	S
Psychology	500	500	S	S	S	S
Social sciences	900	600	S	200	S	100
Economics	400	200	S	200	S	S
Socio/anthro	100	100	S	S	S	S
Other soc sciences	400	300	S	S	S	S
Total engineering	1,900	1,100	S	600	S	100
Aero/astro	100	100	S	S	S	S
Chemical	200	100	S	100	S	S
Civil	200	100	S	S	S	S
Elect/electron	700	500	S	200	S	100
Industrial	S	S	S	S	S	S
Materials	100	100	S	100	S	S
Mechanical	200	100	S	100	S	S
Mining	S	S	S	S	S	S
Nuclear	S	S	S	S	S	S
Petroleum	S	S	S	S	S	S
Other engineering	300	200	S	100	S	S

1/ Includes members of all racial groups

KEY: S = Data suppressed for statistical reasons

NOTES: Components will not add to totals because (a) racial and ethnic categories are not mutually exclusive, (b) total includes "other" and "no report," and (c) both components and totals have been rounded.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table 8-34. 1989 science and engineering (S&E) master's-degree recipients, by field of degree, employment status, and sex: 1990

Field of degree	Total population			Total employed			Employed in S&E occupation		
	Total	Men	Women	Total	Men	Women	Total	Men	Women
Total, all fields	54,300	37,300	16,900	51,800	36,100	15,600	42,900	31,000	11,800
Total sciences	36,000	21,900	14,100	34,400	21,200	13,200	26,800	17,200	9,600
Physical sciences	2,500	1,700	900	2,400	1,600	800	2,000	1,400	600
Chemistry	900	500	400	900	500	400	800	500	300
Physics/astronomy	900	800	100	800	700	100	600	600	S
Other phys sciences	800	400	400	800	400	400	600	300	300
Math/statistics	4,000	2,500	1,500	3,800	2,400	1,400	3,200	2,000	1,200
Computer science	10,500	7,500	2,900	10,100	7,400	2,700	9,300	6,800	2,500
Environ science	2,000	1,400	700	2,000	1,300	600	1,800	1,200	600
Life sciences	6,500	3,600	3,000	6,100	3,400	2,700	4,400	2,500	1,900
Biology	3,900	2,000	1,900	3,800	2,000	1,800	2,600	1,200	1,400
Agr science	2,600	1,600	1,000	2,300	1,400	900	1,800	1,300	500
Psychology	2,500	1,000	1 500	2,400	1,000	1,400	1,300	500	800
Social sciences	7,900	4,200	3,700	7,500	4,000	3,500	4,800	2,700	2,000
Economics	2,100	1,400	700	1,900	1,300	600	1,200	1,000	200
Socio/anthro	1,400	800	500	1,400	800	500	1,000	600	300
Other soc sciences	4,500	2,000	2,400	4,200	1,900	2,300	2,600	1,100	1,500
Total engineering	18,200	15,400	2,800	17,400	14,900	2,400	16,100	13,800	2,300
Aero/astro	800	800	S	800	800	S	700	700	S
Chemical	700	500	200	600	400	200	600	400	200
Civil	2,300	2,000	300	2,300	2,000	300	2,200	1,900	300
Elect/electron	5,800	5,000	900	5,400	4,800	600	5,100	4,500	500
Industrial	1,100	800	200	1,000	800	200	800	600	200
Materials	600	400	200	500	400	100	500	400	100
Mechanical	3,300	3,100	100	3,300	3,100	100	3,100	2,900	100
Mining	200	200	S	200	200	S	200	200	S
Nuclear	100	100	S	100	100	S	100	100	S
Petroleum	100	100	S	100	100	S	100	100	S
Other engineering	3,200	2,400	800	3,000	2,200	800	2,800	2,000	700

See explanatory information and SOURCE at end of table.

Table B-34. 1989 science and engineering (S&E) master's-degree recipients, by field of degree, employment status, and sex: 1990

Field of degree	Unemployed			Outside labor force		
	Total	Men	Women	Total	Men	Women
Total, all fields	1,000	600	500	1,400	600	900
Total sciences	700	400	300	900	300	600
Physical sciences	100	100	S	S	S	S
Chemistry	S	S	S	S	S	S
Physics/astronomy	S	S	S	S	S	S
Other phys sciences	S	S	S	S	S	S
Math/statistics	100	100	S	100	S	100
Computer science	100	100	100	200	100	100
Environ science	100	S	S	S	S	S
Life sciences	100	100	100	300	100	100
Biology	100	S	100	S	S	S
Agr science	S	S	S	300	100	100
Psychology	S	S	S	100	S	100
Social sciences	200	100	100	200	100	100
Economics	S	S	S	100	S	100
Socio/anthro	S	S	S	S	S	S
Other soc sciences	200	S	100	100	S	S
Total engineering	300	200	100	500	300	300
Aero/astro	S	S	S	S	S	S
Chemical	S	S	S	S	S	S
Civil	S	S	S	S	S	S
Elect/electron	100	S	100	300	200	200
Industrial	100	S	S	S	S	S
Materials	S	S	S	S	S	S
Mechanical	S	S	S	S	S	S
Mining	S	S	S	S	S	S
Nuclear	S	S	S	S	S	S
Petroleum	S	S	S	S	S	S
Other engineering	100	100	S	100	100	S

KEY: S = Data suppressed for statistical reasons

NOTES: Because of rounding, components may not add to totals.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-35. 1989 science and engineering (S&E) master's-degree recipients, by field of degree, employment status, and racial/ethnic group: 1990

Field of degree	Total population					
	Total	White	Black	Asian	Native American	Hispanic 1/
Total, all fields	54,300	41,200	2,400	5,400	400	2,000
Total sciences	36,000	27,800	2,000	3,000	200	1,100
Physical sciences	2,500	2,000	100	200	S	100
Chemistry	900	700	S	100	S	S
Physics/astronomy	900	700	S	100	S	S
Other phys sciences	800	600	100	S	S	S
Math/statistics	4,000	3,300	100	300	S	100
Computer science	10,500	7,400	400	1,700	S	400
Environ science	2,000	1,800	S	100	S	100
Life sciences	6,500	5,500	100	400	S	300
Biology	3,900	3,300	S	300	S	200
Agr science	2,600	2,200	100	100	S	100
Psychology	2,500	1,900	300	100	S	100
Social sciences	7,900	5,900	1,000	200	200	100
Economics	2,100	1,500	400	100	S	S
Socio/anthro	1,400	800	400	S	200	S
Other soc sciences	4,500	3,700	200	100	S	100
Total engineering	18,200	13,500	400	2,400	200	900
Aero/astro	800	600	S	100	S	100
Chemical	700	500	S	100	S	100
Civil	2,300	1,400	200	500	S	100
Elect/electron	5,800	3,900	100	1,000	100	300
Industrial	1,100	800	100	100	S	100
Materials	600	500	S	S	S	S
Mechanical	3,300	2,800	S	300	S	S
Mining	200	200	S	S	S	S
Nuclear	100	100	S	S	S	S
Petroleum	100	100	S	S	S	S
Other engineering	3,200	2,600	100	300	S	200

Field of degree	Total employed					
	Total	White	Black	Asian	Native American	Hispanic 1/
Total, all fields	51,800	39,600	2,200	5,000	400	1,800
Total sciences	34,400	26,500	1,800	2,900	200	1,000
Physical sciences	2,400	1,900	100	200	S	S
Chemistry	900	700	S	100	S	S
Physics/astronomy	800	700	S	100	S	S
Other phys sciences	800	600	100	S	S	S
Math/statistics	3,800	3,200	100	300	S	100
Computer science	10,100	7,200	200	1,700	S	300
Environ science	2,000	1,700	S	100	S	100
Life sciences	6,100	5,100	100	400	S	300
Biology	3,800	3,200	S	300	S	200
Agr science	2,300	1,900	100	100	S	100
Psychology	2,400	1,700	300	100	S	100
Social sciences	7,500	5,600	900	200	200	100
Economics	1,900	1,400	400	100	S	S
Socio/anthro	1,400	700	400	S	200	S
Other soc sciences	4,200	3,500	200	100	S	100
Total engineering	17,400	13,100	400	2,100	200	800
Aero/astro	800	600	S	100	S	100
Chemical	600	500	S	100	S	100
Civil	2,300	1,400	200	500	S	100
Elect/electron	5,400	3,800	100	800	100	200
Industrial	1,000	700	100	100	S	100
Materials	500	500	S	S	S	S
Mechanical	3,300	2,800	S	300	S	S
Mining	200	200	S	S	S	S
Nuclear	100	100	S	S	S	S
Petroleum	100	100	S	S	S	S
Other engineering	3,000	2,400	100	200	S	200

See explanatory information and SOURCE at end of table.

Table B-35. 1989 science and engineering (S&E) master's-degree recipients, by field of degree, employment status, and racial/ethnic group: 1990

Field of degree	Employed in S&E occupation					
	Total	White	Black	Asian	Native American	Hispanic 1/
Total, all fields	42,900	32,800	1,600	4,500	400	1,400
Total sciences	26,800	20,600	1,300	2,600	200	800
Physical sciences	2,000	1,600	100	100	S	S
Chemistry	800	600	S	100	S	S
Physics/astronomy	600	500	S	100	S	S
Other phys sciences	600	500	100	S	S	S
Math/statistics	3,200	2,700	100	200	S	100
Computer science	9,300	6,500	200	1,700	S	300
Environ science	1,800	1,600	S	100	S	100
Life sciences	4,400	3,800	S	300	S	200
Biology	2,600	2,300	S	300	S	100
Agr science	1,800	1,600	S	S	S	100
Psychology	1,300	1,000	100	S	S	S
Social sciences	4,800	3,400	700	100	200	S
Economics	1,200	700	300	100	S	S
Socio/anthro	1,000	400	300	S	200	S
Other soc sciences	2,600	2,200	100	100	S	S
Total engineering	16,100	12,200	400	1,900	100	700
Aero/astro	700	500	S	100	S	100
Chemical	600	500	S	100	S	S
Civil	2,200	1,400	100	500	S	100
Elect/electron	5,100	3,500	100	800	100	200
Industrial	800	600	100	100	S	100
Materials	500	400	S	S	S	S
Mechanical	3,100	2,600	S	200	S	S
Mining	200	200	S	S	S	S
Nuclear	100	100	S	S	S	S
Petroleum	100	100	S	S	S	S
Other engineering	2,800	2,300	S	200	S	200

Field of degree	Unemployed					
	Total	White	Black	Asian	Native American	Hispanic 1/
Total, all fields	1,000	600	100	200	S	100
Total sciences	700	500	100	100	S	S
Physical sciences	100	100	S	S	S	S
Chemistry	S	S	S	S	S	S
Physics/astronomy	S	S	S	S	S	S
Other phys sciences	S	S	S	S	S	S
Math/statistics	100	100	S	S	S	S
Computer science	100	S	100	S	S	S
Environ science	100	100	S	S	S	S
Life sciences	100	100	S	S	S	S
Biology	100	100	S	S	S	S
Agr science	S	S	S	S	S	S
Psychology	S	S	S	S	S	S
Social sciences	200	200	S	S	S	S
Economics	S	S	S	S	S	S
Socio/anthro	S	S	S	S	S	S
Other soc sciences	200	100	S	S	S	S
Total engineering	300	200	S	100	S	100
Aero/astro	S	S	S	S	S	S
Chemical	S	S	S	S	S	S
Civil	S	S	S	S	S	S
Elect/electron	100	S	S	100	S	100
Industrial	100	S	S	S	S	S
Materials	S	S	S	S	S	S
Mechanical	S	S	S	S	S	S
Mining	S	S	S	S	S	S
Nuclear	S	S	S	S	S	S
Petroleum	S	S	S	S	S	S
Other engineering	100	100	S	S	S	S

See explanatory information and SOURCE at end of table.

Table B-35. 1989 science and engineering (S&E) master's-degree recipients, by field of degree, employment status, and racial/ethnic group: 1990

Field of degree	Outside labor force					
	Total	White	Black	Asian	Native American	Hispanic 1/
Total, all fields.....	1,400	1,000	100	200	S	S
Total sciences.....	900	700	100	100	S	S
Physical sciences.....	S	S	S	S	S	S
Chemistry.....	S	S	S	S	S	S
Physics/astronomy.....	S	S	S	S	S	S
Other phys sciences...	S	S	S	S	S	S
Math/statistics.....	100	100	S	S	S	S
Computer science.....	200	100	S	S	S	S
Environ science.....	S	S	S	S	S	S
Life sciences.....	300	200	S	S	S	S
Biology.....	S	S	S	S	S	S
Agr science.....	300	200	S	S	S	S
Psychology.....	100	100	S	S	S	S
Social sciences.....	200	200	S	S	S	S
Economics.....	100	100	S	S	S	S
Socio/anthro.....	S	S	S	S	S	S
Other soc sciences....	100	100	S	S	S	S
Total engineering.....	500	300	S	200	S	S
Aero/astro.....	S	S	S	S	S	S
Chemical.....	S	S	S	S	S	S
Civil.....	S	S	S	S	S	S
Elect/electron.....	300	200	S	200	S	S
Industrial.....	S	S	S	S	S	S
Materials.....	S	S	S	S	S	S
Mechanical.....	S	S	S	S	S	S
Mining.....	S	S	S	S	S	S
Nuclear.....	S	S	S	S	S	S
Petroleum.....	S	S	S	S	S	S
Other engineering.....	100	100	S	S	S	S

1/ Includes members of all racial groups

KEY: S = Data suppressed for statistical reasons

NOTES: Components will not add to totals because (a) racial and ethnic categories are not mutually exclusive, (b) total includes "other" and "no report," and (c) both components and totals have been rounded.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-36. 1989 science and engineering master's-degree recipients, by field of degree, sex, and type of employer: 1990

Field of degree and sex	Total employed	Type of employer										
		Business and industry			Educational institutions			Non-profit orgs	Federal Government	State/local governments	Other	No report
		Total	Industry	Self-employed	Total	4-yr college univ	Other					
Total, all fields	51,700	30,700	29,100	1,500	9,300	4,600	4,600	1,000	3,600	2,900	4,200	S
Men	36,100	23,100	22,400	700	5,200	3,000	2,200	600	2,700	1,600	2,900	S
Women	15,600	7,600	6,700	900	4,100	1,600	2,400	400	900	1,300	1,400	S
Total sciences	34,400	17,500	16,100	1,300	8,700	4,100	4,600	800	2,200	2,300	2,900	S
Men	21,200	11,700	11,100	600	4,700	2,500	2,200	400	1,600	1,200	1,600	S
Women	13,200	5,800	5,000	800	4,000	1,600	2,400	400	600	1,100	1,200	S
Physical sciences	2,400	1,200	1,200	S	800	300	400	100	100	100	100	S
Men	1,600	800	800	S	500	300	200	100	100	100	100	S
Women	800	400	400	S	300	S	300	S	S	S	S	S
Chemistry	900	600	600	S	100	100	100	S	S	S	S	S
Men	500	400	400	S	100	100	S	S	S	S	S	S
Women	400	300	300	S	S	S	S	S	S	S	S	S
Physics/astronomy	800	200	200	S	300	200	S	100	100	S	100	S
Men	700	200	200	S	200	200	S	100	100	S	100	S
Women	100	S	S	S	S	S	S	S	S	S	S	S
Other phys sciences	800	300	300	S	400	S	300	S	S	S	S	S
Men	400	200	200	S	100	S	100	S	S	S	S	S
Women	400	100	100	S	300	S	200	S	S	S	S	S
Math/statistics	3,800	1,700	1,700	S	1,600	400	1,100	100	200	S	300	S
Men	2,400	1,200	1,100	S	800	400	400	S	100	S	300	S
Women	1,400	600	600	S	800	100	700	S	S	S	S	S
Computer science	10,100	7,800	7,600	200	800	500	300	100	400	200	800	S
Men	7,400	5,700	5,500	200	600	300	200	S	300	200	700	S
Women	2,700	2,200	2,200	S	200	100	100	100	100	S	100	S
Environ science	2,000	1,200	1,200	100	200	200	100	S	200	200	200	S
Men	1,300	900	800	S	200	100	S	S	100	100	100	S
Women	600	400	400	S	100	S	S	S	S	100	100	S
Life sciences	6,100	1,900	1,700	300	2,300	1,200	1,100	100	600	700	600	S
Men	3,400	1,300	1,200	100	1,000	500	500	100	300	500	100	S
Women	2,700	600	500	100	1,300	700	600	S	300	200	400	S
Biology	3,800	1,000	900	100	1,800	800	1,000	100	200	400	300	S
Men	2,000	700	600	S	800	400	500	100	S	300	S	S
Women	1,800	400	200	100	1,000	500	500	S	200	100	200	S
Agr science	2,300	900	800	100	500	400	100	S	400	300	300	S
Men	1,400	700	600	100	200	200	S	S	300	200	100	S
Women	900	300	200	S	300	200	100	S	100	100	200	S
Psychology	2,400	900	900	S	700	300	400	100	100	100	400	S
Men	1,000	400	400	S	300	100	200	S	100	S	100	S
Women	1,400	500	500	S	400	200	200	100	S	100	300	S
Social sciences	7,500	2,700	1,900	800	2,400	1,200	1,200	300	700	1,000	400	S
Men	4,000	1,500	1,300	200	1,400	800	600	100	600	400	200	S
Women	3,500	1,200	600	600	1,000	400	500	200	200	700	300	S
Economics	1,900	1,100	1,000	100	700	500	200	S	100	100	100	S
Men	1,300	700	600	100	600	400	100	S	S	S	S	S
Women	600	300	300	S	100	100	100	S	100	100	S	S
Socio/anthro	1,300	200	100	100	500	400	100	100	400	100	100	S
Men	800	100	100	S	300	200	S	S	400	100	S	S
Women	500	100	S	S	200	200	100	100	S	100	100	S
Other soc sciences	4,200	1,500	800	600	1,200	300	900	200	300	800	300	S
Men	1,900	700	600	100	600	100	500	100	200	300	100	S
Women	2,300	800	300	600	600	200	400	100	100	600	200	S

See explanatory information and SOURCE at end of table.

Table 8-36. 1989 science and engineering master's-degree recipients, by field of degree, sex, and type of employer: 1990

Field of degree and sex	Total employed	Type of employer										
		Business and industry			Educational institutions			Non-profit orgs	Federal Govern-ment	State/ local govern-ments	Other	No report
		Total	Industry	Self-employed	Total	4-yr college univ	Other					
Total engineering	17,300	13,200	13,000	200	600	500	100	100	1,400	600	1,400	S
Men	14,900	11,400	11,300	100	500	500	S	100	1,200	400	1,200	S
Women	2,400	1,8	1,700	100	100	S	S	S	300	200	100	S
Aero/astro	800	400	400	S	S	S	S	100	200	S	100	S
Men	800	400	400	S	S	S	S	100	200	S	100	S
Chemical	600	600	600	S	100	S	S	S	S	S	S	S
Men	400	400	400	S	S	S	S	S	S	S	S	S
Women	200	200	200	S	S	S	S	S	S	S	S	S
Civil	2,300	1,600	1,600	S	S	S	S	S	200	200	200	S
Men	2,000	1,400	1,400	S	S	S	S	S	100	200	200	S
Women	300	200	200	S	S	S	S	S	100	S	S	S
Elect/electron	5,400	4,500	4,400	100	200	200	S	S	300	100	300	S
Men	4,800	4,000	4,000	S	200	200	S	S	300	S	300	S
Women	600	500	400	100	S	S	S	S	S	100	S	S
Industrial	1,000	800	800	S	S	S	S	S	100	S	100	S
Men	800	600	600	S	S	S	S	S	100	S	100	S
Women	200	200	200	S	S	S	S	S	S	S	S	S
Materials	500	500	500	S	S	S	S	S	S	S	S	S
Men	400	300	300	S	S	S	S	S	S	S	S	S
Women	100	100	100	S	S	S	S	S	S	S	S	S
Mechanical	3,300	2,600	2,600	100	100	100	S	S	200	S	200	S
Men	3,100	2,500	2,500	100	100	100	S	S	200	S	200	S
Women	100	100	100	S	S	S	S	S	S	S	S	S
Mining	200	100	100	S	S	S	S	S	S	S	S	S
Men	200	100	100	S	S	S	S	S	S	S	S	S
Women	S	S	S	S	S	S	S	S	S	S	S	S
Nuclear	100	100	100	S	S	S	S	S	S	S	S	S
Men	100	100	100	S	S	S	S	S	S	S	S	S
Women	S	S	S	S	S	S	S	S	S	S	S	S
Petroleum	100	100	100	S	S	S	S	S	S	S	S	S
Men	100	100	100	S	S	S	S	S	S	S	S	S
Women	S	S	S	S	S	S	S	S	S	S	S	S
Other engineering	3,000	2,000	2,000	S	100	S	S	S	400	200	300	S
Men	2,200	1,500	1,500	S	S	S	S	S	300	100	300	S
Women	800	500	500	S	S	S	S	S	100	100	S	S

KEY: S = Data suppressed for statistical reasons

NOTES: Because of rounding, components may not add to totals.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table 8-37. 1989 science and engineering master's-degree recipients, by field of degree, sex, and primary work activity: 1990

Field of degree and sex	Total employed	Primary work activity						
		Research and development				Management/administration		
		Total	Basic	Applied	Develop-ment	Total	Of R&D	Of non-R&D
Total, all fields	51,700	17,400	1,500	3,900	12,000	6,700	2,300	4,400
Men	36,100	13,900	1,000	2,900	10,000	4,800	1,800	3,000
Women	15,600	3,500	500	1,000	2,000	1,900	500	1,400
Total sciences	34,400	8,200	1,200	2,600	4,400	4,700	1,300	3,400
Men	21,200	5,900	800	1,800	3,300	3,200	900	2,300
Women	13,200	2,300	400	800	1,100	1,500	300	1,100
Physical sciences	2,400	900	200	300	300	200	100	100
Men	1,600	700	200	200	300	100	S	S
Women	800	200	100	100	S	100	100	S
Chemistry	900	400	100	200	100	100	100	S
Men	500	200	100	100	100	S	S	S
Women	400	200	100	100	S	100	100	S
Physics/astronomy	800	300	100	100	100	S	S	S
Men	700	300	100	100	100	S	S	S
Women	100	S	S	S	S	S	S	S
Other phys sciences	800	100	S	S	100	S	S	S
Men	400	100	S	S	100	S	S	S
Women	400	S	S	S	S	S	S	S
Math/statistics	3,800	600	100	200	400	400	100	300
Men	2,400	400	S	100	300	400	100	200
Women	1,400	200	S	100	100	100	S	100
Computer science	10,100	3,400	S	400	2,900	1,500	800	800
Men	7,400	2,600	S	300	2,200	1,300	600	700
Women	2,700	800	S	100	800	300	100	100
Environ science	2,000	500	100	300	100	200	100	200
Men	1,300	400	100	200	100	200	100	100
Women	600	100	S	100	S	S	S	S
Life sciences	6,100	1,800	500	900	400	700	100	600
Men	3,400	1,100	300	500	300	500	100	400
Women	2,700	700	300	400	100	200	S	200
Biology	3,800	1,200	400	600	200	300	100	200
Men	2,000	800	300	400	100	200	100	200
Women	1,800	400	200	200	S	S	S	S
Agr science	2,300	600	100	300	200	400	S	400
Men	1,400	300	S	100	100	300	S	200
Women	900	300	100	100	100	100	S	100
Psychology	2,400	200	S	S	100	500	S	500
Men	1,000	100	S	S	100	200	S	200
Women	1,400	100	S	S	100	300	S	300
Social sciences	7,500	800	200	500	100	1,100	100	1,100
Men	4,000	700	200	400	100	600	S	600
Women	3,500	100	S	100	S	500	100	400
Economics	1,900	200	S	200	S	400	S	400
Men	1,300	200	S	200	S	300	S	300
Women	600	S	S	S	S	100	S	100
Socio/anthro	1,300	300	200	100	S	100	S	100
Men	800	300	200	S	S	100	S	100
Women	500	100	S	100	S	100	S	100
Other soc sciences	4,200	300	S	200	100	600	S	600
Men	1,900	200	S	200	S	200	S	200
Women	2,300	S	S	S	S	400	S	300

See explanatory information and SOURCE at end of table.

Table S-37. 1989 science and engineering master's-degree recipients, by field of degree, sex, and primary work activity: 1990

Field of degree and sex	Primary work activity						
	Teaching	Production/ inspection	Reporting/ stat work/ computing	Sales	Profes- sional services	Other	No report
Total, all fields	6,300	3,800	9,000	600	600	6,100	200
Men	3,700	3,100	5,700	400	100	3,700	100
Women	2,600	700	3,300	600	500	2,400	100
Total sciences	6,000	1,900	7,600	1,200	600	4,000	100
Men	3,400	1,400	4,500	700	100	2,000	S
Women	2,600	500	3,100	500	500	2,000	100
Physical sciences	700	300	200	S	S	200	S
Men	400	200	200	S	S	100	S
Women	300	100	S	S	S	100	S
Chemistry	200	100	S	S	S	S	S
Men	100	100	S	S	S	S	S
Women	S	S	S	S	S	S	S
Physics/astronomy	200	S	100	S	S	100	S
Men	200	S	100	S	S	S	S
Women	S	S	S	S	S	S	S
Other phys sciences	400	100	S	S	S	100	S
Men	100	S	S	S	S	100	S
Women	300	100	S	S	S	S	S
Math/statistics	1,400	200	900	S	S	200	S
Men	700	200	500	S	S	200	S
Women	700	S	400	S	S	100	S
Computer science	500	400	3,700	100	S	400	S
Men	400	300	2,400	100	S	300	S
Women	100	S	1,300	S	S	100	S
Environ science	100	300	300	S	S	500	S
Men	100	200	200	S	S	300	S
Women	100	100	100	S	S	200	S
Life sciences	1,200	600	500	500	300	600	S
Men	500	300	200	400	100	300	S
Women	700	200	300	100	200	300	S
Biology	1,000	200	300	400	200	200	S
Men	400	S	100	400	S	100	S
Women	600	200	200	100	200	100	S
Agr science	200	400	200	S	100	400	S
Men	100	300	200	S	100	200	S
Women	100	100	100	S	S	200	S
Psychology	800	S	200	S	300	400	S
Men	600	S	S	S	S	100	S
Women	200	S	200	S	300	300	S
Social sciences	1,300	100	1,700	600	100	1,700	100
Men	700	100	900	200	S	800	S
Women	600	S	800	400	100	900	100
Economics	200	S	500	400	S	100	S
Men	100	S	400	100	S	100	S
Women	100	S	100	300	S	S	S
Socio/anthro	200	S	100	S	100	500	S
Men	S	S	100	S	S	400	S
Women	200	S	S	S	100	100	S
Other soc sciences	900	100	1,100	100	S	1,100	100
Men	500	100	400	S	S	300	S
Women	300	S	600	100	S	800	100

See explanatory information and SOURCE at end of table.

Table B-37. 1989 science and engineering master's-degree recipients, by field of degree, sex, and primary work activity: 1990

Field of degree and sex	Total employed	Primary work activity						
		Research and development				Management/administration		
		Total	Basic	Applied	Develop-ment	Total	Of R&D	Of non-R&D
Total engineering	17,300	9,200	300	1,300	7,600	2,000	1,000	1,000
Men	14,900	8,000	200	1,100	6,700	1,600	900	700
Women	2,400	1,200	100	200	900	400	100	300
Aero/astro	800	500	S	200	300	S	S	S
Men	800	500	S	200	300	S	S	S
Chemical	600	400	S	100	300	100	S	100
Men	400	300	S	100	200	S	S	S
Women	200	100	S	S	100	100	S	100
Civil	2,300	800	S	100	600	200	S	200
Men	2,000	700	S	100	500	100	S	100
Women	300	100	S	S	100	100	S	100
Elect/electron	5,400	3,500	200	300	3,000	600	500	100
Men	4,800	3,000	100	200	2,700	500	400	100
Women	600	400	100	100	200	100	100	S
Industrial	1,000	200	S	S	200	200	100	200
Men	800	200	S	S	100	200	100	100
Women	200	100	S	S	S	S	S	S
Materials	500	400	S	100	300	S	S	S
Men	400	300	S	S	200	S	S	S
Women	100	100	S	S	100	S	S	S
Mechanical	3,300	2,100	S	100	2,000	300	200	100
Men	3,100	2,000	S	100	1,800	300	200	100
Women	100	100	S	S	100	S	S	S
Mining	200	S	S	S	S	S	S	S
Men	200	S	S	S	S	S	S	S
Women	S	S	S	S	S	S	S	S
Nuclear	100	100	S	S	S	S	S	S
Men	100	S	S	S	S	S	S	S
Women	S	S	S	S	S	S	S	S
Petroleum	100	S	S	S	S	S	S	S
Men	100	S	S	S	S	S	S	S
Women	S	S	S	S	S	S	S	S
Other engineering	3,000	1,200	S	300	900	500	200	300
Men	2,200	1,000	S	300	700	400	200	200
Women	800	300	S	S	200	100	S	100

See explanatory information and SOURCE at end of table.

Table B-37. 1989 science and engineering master's-degree recipients, by field of degree, sex, and primary work activity: 1990

Field of degree and sex	Primary work activity						
	Teaching	Production/ inspection	Reporting/ stat work/ computing	Sales	Profes- sional services	Other	No report
Total engineering	300	1,900	1,400	400	S	2,100	S
Men	300	1,800	1,200	300	S	1,700	S
Women	S	200	200	100	S	400	S
Aero/astro	S	S	100	S	S	100	S
Men	S	S	100	S	S	100	S
Chemical	S	100	S	S	S	S	S
Men	S	100	S	S	S	S	S
Women	S	S	S	S	S	S	S
Civil	S	200	200	100	S	700	S
Men	S	200	200	100	S	700	S
Women	S	S	S	S	S	100	S
Elect/electron	S	600	400	200	S	300	S
Men	S	600	400	100	S	300	S
Women	S	S	S	100	S	S	S
Industrial	S	300	100	S	S	100	S
Men	S	200	100	S	S	100	S
Women	S	S	100	S	S	100	S
Materials	S	100	S	S	S	S	S
Men	S	100	S	S	S	S	S
Women	S	S	S	S	S	S	S
Mechanical	200	300	200	S	S	100	S
Men	200	300	200	S	S	100	S
Women	S	S	S	S	S	S	S
Mining	S	100	S	S	S	S	S
Men	S	100	S	S	S	S	S
Women	S	S	S	S	S	S	S
Nuclear	S	S	S	S	S	S	S
Men	S	S	S	S	S	S	S
Women	S	S	S	S	S	S	S
Petroleum	S	100	S	S	S	S	S
Men	S	100	S	S	S	S	S
Women	S	S	S	S	S	S	S
Other engineering	100	200	300	100	S	600	S
Men	S	200	200	100	S	400	S
Women	S	S	S	S	S	300	S

KEY: S = Data suppressed for statistical reasons

NOTES: Because of rounding, components may not add to totals.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table 8-38. 1989 science and engineering master's-degree recipients, by field of degree, type of employer, and primary work activity: 1990

Field of degree and type of employer	Total employed	Primary work activity						
		Research and development				Management/administration		
		Total	Basic	Applied	Develop-ment	Total	Of R&D	Of non-R&D
Total, all fields	51,800	17,500	1,500	3,900	12,000	6,700	2,300	4,400
Business and Industry	30,700	12,500	400	1,700	10,400	3,700	1,500	2,200
Industry	29,200	12,400	400	1,700	10,300	3,500	1,400	2,100
Self employed	1,500	100	S	S	100	200	S	200
Educ inst, total	9,300	2,000	900	700	400	500	200	300
4-yr college/univ.	4,600	1,700	800	600	400	300	200	200
Other	4,600	300	100	100	S	200	S	200
Nonprofit orgs	1,000	300	S	200	100	100	100	100
Federal Government	3,600	1,500	200	700	600	700	300	400
State/local govt	2,900	700	S	400	200	500	S	500
Other	4,200	500	S	200	300	1,200	300	900
No report	S	S	S	S	S	S	S	S
Total sciences	34,400	8,200	1,200	2,600	4,400	4,700	1,300	3,400
Business and Industry	17,500	5,000	300	1,100	3,700	2,500	900	1,600
Industry	16,100	4,900	300	1,100	3,600	2,300	900	1,400
Self employed	1,300	100	S	S	100	200	S	100
Educ inst, total	8,700	1,700	800	600	300	400	100	300
4-yr college/univ.	4,100	1,400	700	500	200	200	100	200
Other	4,600	300	100	100	S	200	S	200
Nonprofit orgs	900	200	S	200	100	100	S	100
Federal Government	2,200	700	100	400	200	300	100	200
State/local govt	2,300	400	S	300	100	400	S	400
Other	2,900	200	S	100	100	1,000	100	800
No report	S	S	S	S	S	S	S	S
Physical sciences	2,400	900	200	300	300	200	100	100
Business and Industry	1,200	600	100	200	300	100	100	S
Industry	1,200	600	100	200	300	100	100	S
Self employed	S	S	S	S	S	S	S	S
Educ inst, total	800	100	100	S	S	S	S	S
4-yr college/univ.	300	100	100	S	S	S	S	S
Other	400	S	S	S	S	S	S	S
Nonprofit orgs	100	S	S	S	S	S	S	S
Federal Government	100	100	S	S	S	S	S	S
State/local govt	100	S	S	S	S	S	S	S
Other	100	100	S	S	S	S	S	S
Math/statistics	3,800	600	100	200	400	400	100	300
Business and Industry	1,700	400	S	100	300	200	100	100
Industry	1,700	400	S	100	300	200	100	100
Self employed	S	S	S	S	S	S	S	S
Educ inst, total	1,600	100	100	S	S	S	S	S
4-yr college/univ.	400	S	S	S	S	S	S	S
Other	1,100	S	S	S	S	S	S	S
Nonprofit orgs	100	S	S	S	S	S	S	S
Federal Government	200	100	S	S	S	S	S	S
State/local govt	S	S	S	S	S	S	S	S
Other	300	S	S	S	S	200	S	200
Computer science	10,100	3,400	S	400	2,900	1,500	800	800
Business and Industry	7,800	2,900	S	200	2,700	1,000	600	400
Industry	7,600	2,800	S	200	2,600	1,000	600	400
Self employed	200	100	S	S	100	S	S	S
Educ inst, total	800	200	S	100	100	100	S	100
4-yr college/univ.	500	200	S	100	100	100	S	S
Other	300	S	S	S	S	S	S	S
Nonprofit orgs	100	S	S	S	S	S	S	S
Federal Government	400	200	S	100	100	100	100	S
State/local govt	200	100	S	S	100	S	S	S
Other	800	S	S	S	S	300	100	300

See explanatory information and SOURCE at end of table.

Table B-38. 1989 science and engineering master's-degree recipients, by field of degree, type of employer, and primary work activity: 1990

Field of degree and type of employer	Primary work activity						
	Teaching	Production/ inspection	Reporting/ stat work/ computing	Sales	Profes- sional services	Other	No report
Total, all fields	6,300	3,800	9,000	1,600	600	6,100	200
Business and Industry	700	2,600	5,600	1,500	100	4,000	100
Industry	600	2,500	5,500	1,200	S	3,300	100
Self employed	S	100	100	300	S	700	S
Educ inst, total	5,100	100	900	S	100	500	S
4-yr college/univ.	1,300	100	800	S	100	300	S
Other	3,900	S	200	S	S	200	S
Nonprofit orgs	100	S	400	S	S	S	S
Federal Government	100	300	600	S	S	500	S
State/local govt	100	100	1,200	S	100	300	S
Other	300	700	400	S	300	800	S
No report	S	S	S	S	S	S	S
Total sciences	6,000	1,900	7,600	1,200	600	4,000	100
Business and Industry	600	1,300	4,500	1,200	100	2,200	S
Industry	600	1,200	4,400	1,000	S	1,500	S
Self employed	S	100	100	200	S	700	S
Educ inst, total	5,000	100	900	S	100	500	S
4-yr college/univ.	1,200	100	800	S	100	300	S
Other	3,800	S	200	S	S	200	S
Nonprofit orgs	100	S	300	S	S	S	S
Federal Government	100	200	400	S	S	400	S
State/local govt	100	100	1,100	S	100	200	S
Other	100	200	300	S	300	700	S
No report	S	S	S	S	S	S	S
Physical sciences	700	300	200	S	S	200	S
Business and Industry	100	200	100	S	S	200	S
Industry	100	200	S	S	S	200	S
Self employed	S	S	S	S	S	S	S
Educ inst, total	600	S	S	S	S	S	S
4-yr college/univ.	200	S	S	S	S	S	S
Other	400	S	S	S	S	S	S
Nonprofit orgs	S	S	100	S	S	S	S
Federal Government	S	S	S	S	S	S	S
State/local govt	S	S	S	S	S	S	S
Other	S	S	S	S	S	S	S
Math/statistics	1,400	200	900	S	S	200	S
Business and Industry	S	200	700	S	S	100	S
Industry	S	200	700	S	S	100	S
Self employed	S	S	S	S	S	S	S
Educ inst, total	1,400	S	100	S	S	S	S
4-yr college/univ.	400	S	S	S	S	S	S
Other	1,000	S	S	S	S	S	S
Nonprofit orgs	S	S	S	S	S	S	S
Federal Government	S	S	S	S	S	S	S
State/local govt	S	S	S	S	S	S	S
Other	S	S	S	S	S	100	S
Computer science	500	400	3,700	100	S	400	S
Business and Industry	100	300	3,000	100	S	400	S
Industry	100	300	3,000	100	S	400	S
Self employed	S	S	S	100	S	S	S
Educ inst, total	300	S	200	S	S	S	S
4-yr college/univ.	100	S	100	S	S	S	S
Other	200	S	S	S	S	S	S
Nonprofit orgs	S	S	100	S	S	S	S
Federal Government	S	S	100	S	S	S	S
State/local govt	S	S	100	S	S	S	S
Other	100	100	200	S	S	S	S

See explanatory information and SOURCE at end of table.

Table B-38. 1989 science and engineering master's-degree recipients, by field of degree, type of employer, and primary work activity: 1990

Field of degree and type of employer	Total employed	Primary work activity						
		Research and development				Management/administration		
		Total	Basic	Applied	Develop-ment	Total	Of R&D	Of non-R&D
Environ science	2,000	500	100	300	100	200	100	200
Business and Industry	1,200	300	S	200	100	100	S	100
Industry	1,200	300	S	200	100	100	S	100
Self employed	100	S	S	S	S	S	S	S
Educ inst, total	200	100	100	S	S	S	S	S
4-yr college/univ.	200	100	100	S	S	S	S	S
Other	100	S	S	S	S	S	S	S
Nonprofit orgs	S	S	S	S	S	S	S	S
Federal Government	200	100	S	100	S	S	S	S
State/local govt	200	S	S	S	S	S	S	S
Other	200	S	S	S	S	S	S	S
No report	S	S	S	S	S	S	S	S
Life sciences	6,100	1,800	500	900	400	700	100	600
Business and Industry	1,900	500	100	200	200	200	S	200
Industry	1,700	500	100	200	200	200	S	100
Self employed	300	S	S	S	S	S	S	S
Educ inst, total	2,300	800	400	300	100	100	S	S
4-yr college/univ.	1,200	600	300	200	100	100	S	S
Other	1,100	200	100	100	S	S	S	S
Nonprofit orgs	100	100	S	100	S	S	S	S
Federal Government	600	100	S	100	S	100	S	100
State/local govt	700	200	S	200	S	200	S	200
Other	600	100	S	100	S	100	S	100
Psychology	2,400	200	S	S	100	500	S	500
Business and Industry	900	S	S	S	S	300	S	300
Industry	900	S	S	S	S	300	S	300
Educ inst, total	700	S	S	S	S	S	S	S
4-yr college/univ.	300	S	S	S	S	S	S	S
Other	400	S	S	S	S	S	S	S
Nonprofit orgs	100	S	S	S	S	S	S	S
Federal Government	100	100	S	S	100	S	S	S
State/local govt	100	S	S	S	S	100	S	100
Other	400	S	S	S	S	100	S	100
Social sciences	7,500	800	200	500	100	1,200	100	1,100
Business and Industry	2,700	300	S	100	100	500	S	400
Industry	1,900	300	S	100	100	400	S	400
Self employed	800	S	S	S	S	100	S	S
Educ inst, total	2,400	300	200	100	S	200	S	200
4-yr college/univ.	1,200	300	200	100	S	100	S	100
Other	1,200	S	S	S	S	100	S	100
Nonprofit orgs	300	100	S	100	S	100	S	S
Federal Government	700	100	S	100	S	100	S	100
State/local govt	1,000	100	S	100	S	100	S	100
Other	400	S	S	S	S	200	S	200
Total engineering	17,400	9,200	300	1,300	7,600	2,000	1,000	1,000
Business and Industry	13,200	7,400	100	600	6,700	1,200	500	700
Industry	13,000	7,400	100	600	6,700	1,200	500	600
Self employed	200	S	S	S	S	100	S	100
Educ inst, total	600	300	100	100	100	100	100	S
4-yr college/univ.	500	300	100	100	100	100	100	S
Other	100	S	S	S	S	S	S	S
Nonprofit orgs	100	100	S	100	S	S	S	S
Federal Government	1,400	800	100	300	400	300	200	100
State/local govt	600	300	S	200	100	100	S	100
Other	1,400	300	S	100	200	200	200	100
No report	S	S	S	S	S	S	S	S

See explanatory information and SOURCE at end of table.

Table B-38. 1989 science and engineering master's-degree recipients, by field of degree, type of employer, and primary work activity: 1990

Field of degree and type of employer	Primary work activity						
	Teaching	Production/ inspection	Reporting/ stat work/ computing	Sales	Profes- sional services	Other	No report
Environ science.....	100	300	300	S	S	500	S
Business and Industry.....	S	300	200	S	S	400	S
Industry.....	S	300	200	S	S	400	S
Self employed.....	S	S	S	S	S	S	S
Educ inst, total....	100	S	S	S	S	S	S
4-yr college/univ.	S	S	S	S	S	S	S
Other.....	100	S	S	S	S	S	S
Nonprofit orgs.....	S	S	S	S	S	S	S
Federal Government..	S	S	S	S	S	S	S
State/local govt....	S	S	100	S	S	S	S
Other.....	S	S	S	S	S	S	S
No report.....	S	S	S	S	S	S	S
Life sciences.....	1,200	600	500	500	300	600	S
Business and Industry.....	S	300	100	500	S	300	S
Industry.....	S	200	100	400	S	200	S
Self employed.....	S	100	S	100	S	S	S
Educ inst, total....	1,100	100	200	S	100	S	S
4-yr college/univ.	200	100	200	S	100	S	S
Other.....	900	S	S	S	S	S	S
Nonprofit orgs.....	100	S	S	S	S	S	S
Federal Government..	S	100	100	S	S	S	S
State/local govt....	100	S	100	S	100	S	S
Other.....	S	S	S	S	100	300	S
Psychology.....	800	S	200	S	300	400	S
Business and Industry.....	300	S	100	S	S	100	S
Industry.....	300	S	100	S	S	100	S
Educ inst, total....	400	S	100	S	S	200	S
4-yr college/univ.	100	S	100	S	S	100	S
Other.....	300	S	S	S	S	100	S
Nonprofit orgs.....	S	S	100	S	S	S	S
Federal Government..	S	S	S	S	S	S	S
State/local govt....	S	S	S	S	S	S	S
Other.....	S	S	S	S	200	S	S
Social sciences.....	1,300	100	1,700	600	100	1,700	100
Business and Industry.....	S	100	400	500	S	900	S
Industry.....	S	100	400	500	S	200	S
Self employed.....	S	S	S	S	S	600	S
Educ inst, total....	1,100	S	400	S	S	200	S
4-yr college/univ.	200	S	300	S	S	200	S
Other.....	900	S	100	S	S	S	S
Nonprofit orgs.....	S	S	S	S	S	S	S
Federal Government..	S	S	100	S	S	300	S
State/local govt....	S	S	700	S	S	200	S
Other.....	S	S	S	S	S	200	S
Total engineering.....	300	1,900	1,400	400	S	2,100	S
Business and Industry.....	S	1,300	1,100	300	S	1,800	S
Industry.....	S	1,300	1,100	200	S	1,800	S
Self employed.....	S	S	S	100	S	S	S
Educ inst, total....	100	S	S	S	S	S	S
4-yr college/univ.	100	S	S	S	S	S	S
Other.....	100	S	S	S	S	S	S
Nonprofit orgs.....	S	S	S	S	S	S	S
Federal Government..	S	100	100	S	S	100	S
State/local govt....	S	S	100	S	S	S	S
Other.....	100	500	100	S	S	200	S
No report.....	S	S	S	S	S	S	S

KEY: S = Data suppressed for statistical reasons

NOTES: Because of rounding, components may not add to totals.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-39. 1989 science and engineering (S&E) master's-degree recipients, by field of degree and field of employment: 1990

Field of degree	Total employed	Employed in non S&E occupation	Employed in S&E occupation	S&E field of employment				
				Chemistry	Physics/ astronomy	Other physical sciences	Math/ stat	Computer science
Total, all fields.....	51,800	8,800	42,900	600	400	800	3,100	10,900
Total sciences.....	34,400	7,600	26,800	600	300	800	2,900	9,000
Physical sciences.....	2,400	400	2,000	500	200	500	100	100
Chemistry.....	900	100	800	500	S	100	S	S
Physics/astronomy.....	800	200	600	S	200	100	S	100
Other phys sciences...	800	100	600	S	S	300	S	S
Math/statistics.....	3,800	600	3,200	S	S	S	2,200	500
Computer science.....	10,100	800	9,300	S	S	S	300	7,900
Environ science.....	2,000	200	1,800	S	S	100	S	100
Life sciences.....	6,100	1,700	4,400	100	S	S	200	100
Biology.....	3,800	1,200	2,600	S	S	S	100	S
Agr science.....	2,300	500	1,800	S	S	S	100	100
Psychology.....	2,400	1,100	1,300	S	S	S	S	100
Social sciences.....	7,500	2,800	4,800	S	S	100	100	100
Economics.....	1,900	700	1,200	S	S	S	100	S
Socio/anthro.....	1,400	400	1,000	S	S	S	S	100
Other soc sciences....	4,200	1,700	2,600	S	S	100	S	S
Total engineering.....	17,400	1,300	16,100	S	100	100	200	1,900
Aero/astro.....	800	100	700	S	S	S	S	S
Chemical.....	600	S	600	S	S	S	S	S
Civil.....	2,300	100	2,200	S	S	S	S	S
Elect/electron.....	5,400	300	5,100	S	100	S	S	1,000
Industrial.....	1,000	200	800	S	S	S	100	200
Materials.....	500	100	500	S	S	S	S	S
Mechanical.....	3,300	200	3,100	S	S	S	S	300
Mining.....	200	S	200	S	S	S	S	S
Nuclear.....	100	S	100	S	S	S	S	S
Petroleum.....	100	S	100	S	S	S	S	S
Other engineering.....	3,000	200	2,800	S	S	S	100	300

Field of degree	S&E field of employment							
	Environ science	Biology	Agric science	Psychology	Economics	Sociology anthro-pology	Other social sciences	Engineering
Total, all fields.....	1,500	2,400	1,600	1,000	700	600	3,000	16,200
Total sciences.....	1,500	2,400	1,500	1,000	700	600	3,000	2,500
Physical sciences.....	S	200	S	S	S	S	S	400
Chemistry.....	S	S	S	S	S	S	S	100
Physics/astronomy.....	S	S	S	S	S	S	S	200
Other phys sciences...	S	100	S	S	S	S	S	200
Math/statistics.....	S	S	S	S	S	S	S	400
Compucer science.....	S	S	S	S	S	S	S	900
Environ science.....	1,300	S	S	S	S	S	S	200
Life sciences.....	200	2,100	1,400	S	S	S	S	300
Biology.....	200	2,000	200	S	S	S	S	S
Agr science.....	100	100	1,200	S	S	S	S	300
Psychology.....	'	S	S	1,000	S	S	100	100
Social sciences.....	S	S	S	S	700	600	2,800	200
Economics.....	S	S	S	S	600	S	400	100
Socio/anthro.	S	S	S	S	S	500	300	S
Other soc sciences....	S	S	S	S	S	100	2,200	100
Total engineering.....	S	S	100	S	S	S	S	13,600
Aero/astro.....	S	S	S	S	S	S	S	700
Chemical.....	S	S	S	S	S	S	S	500
Civil.....	S	S	S	S	S	S	S	2,100
Elect/electron.....	S	S	100	S	S	S	S	3,900
Industrial.....	S	S	S	S	S	S	S	600
Materials.....	S	S	S	S	S	S	S	500
Mechanical.....	S	S	S	S	S	S	S	2,700
Mining.....	S	S	S	S	S	S	S	200
Nuclear.....	S	S	S	S	S	S	S	100
Petroleum.....	S	S	S	S	S	S	S	100
Other engineering.....	S	S	S	S	S	S	S	2,300

KEY: S = Data suppressed for statistical reasons

NOTES Because of rounding, components may not add to totals.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-40. 1989 science and engineering (S&E) master's-degree recipients employed in S&E occupations, by field of degree, type of employer, and primary work activity: 1990

Field of degree	Employed in S&E occupation	Primary work activity						
		Research and development				Management/administration		
		Total	Basic	Applied	Develop-ment	Total	Of R&D	Of non-R&D
Total, all fields	42,900	16,500	1,400	3,700	11,300	4,900	2,000	2,800
Business and Industry	26,600	11,800	300	1,600	9,900	2,600	1,200	1,400
Industry	25,500	11,700	300	1,600	9,800	2,500	1,200	1,300
Self employed	1,200	100	S	S	100	100	S	100
Educ inst, total	6,900	1,800	900	700	200	300	200	200
4-yr college/univ.	3,700	1,600	800	600	200	300	200	200
Other	3,200	200	100	100	S	S	S	S
Nonprofit orgs	600	300	S	200	100	100	S	S
Federal Government	3,500	1,400	200	700	600	600	300	300
State/local govt	2,400	600	S	400	200	500	S	400
Other	3,000	500	S	200	300	700	300	500
Total sciences	26,800	7,900	1,200	2,500	4,200	3,100	1,000	2,000
Business and Industry	14,200	4,900	300	1,000	3,600	1,500	700	800
Industry	13,200	4,800	300	1,000	3,600	1,400	700	700
Self employed	1,000	100	S	S	100	100	S	100
Educ inst, total	6,300	1,500	800	600	100	200	100	200
4-yr college/univ.	3,200	1,300	700	500	100	200	100	200
Other	3,100	200	100	100	S	S	S	S
Nonprofit orgs	600	200	S	200	100	100	S	S
Federal Government	2,100	600	100	400	200	300	100	200
State/local govt	1,900	400	S	300	100	400	S	400
Other	1,800	200	S	100	100	600	100	400
Physical sciences	2,000	800	200	300	300	100	100	100
Business and Industry	1,000	500	100	200	200	100	100	S
Industry	1,000	500	100	200	200	100	100	S
Self employed	S	S	S	S	S	S	S	S
Educ inst, total	600	100	100	S	S	S	S	S
4-yr college/univ.	300	100	100	S	S	S	S	S
Other	300	S	S	S	S	S	S	S
Nonprofit orgs	S	S	S	S	S	S	S	S
Federal Government	100	100	S	S	S	S	S	S
State/local govt	100	S	S	S	S	S	S	S
Other	100	100	S	S	S	S	S	S
Math/statistics	3,200	600	S	200	400	300	100	200
Business and Industry	1,500	400	S	100	300	100	100	100
Industry	1,500	400	S	100	300	100	100	100
Self employed	S	S	S	S	S	S	S	S
Educ inst, total	1,300	100	S	S	S	S	S	S
4-yr college/univ.	400	S	S	S	S	S	S	S
Other	900	S	S	S	S	S	S	S
Nonprofit orgs	S	S	S	S	S	S	S	S
Federal Government	100	100	S	S	S	S	S	S
State/local govt	S	S	S	S	S	S	S	S
Other	200	S	S	S	S	200	S	100
Computer science	9,300	3,400	S	400	2,900	1,100	600	500
Business and Industry	7,200	2,900	S	200	2,700	700	500	200
Industry	7,100	2,800	S	200	2,600	700	500	200
Self employed	200	100	S	S	100	S	S	S
Educ inst, total	600	200	S	100	100	100	S	S
4-yr college/univ.	500	200	S	100	100	100	S	S
Other	200	S	S	S	S	S	S	S
Nonprofit orgs	100	S	S	S	S	S	S	S
Federal Government	400	200	S	100	100	100	100	S
State/local govt	200	100	S	S	100	S	S	S
Other	700	S	S	S	S	300	S	200

See explanatory information and SOURCE at end of table.

Table B-40. 1989 science and engineering (S&E) master's-degree recipients employed in S&E occupations, by field of degree, type of employer, and primary work activity: 1990

Field of degree	Primary work activity						
	Teaching	Production/ inspection	Reporting/ stat work/ computing	Sales	Profes- sional services	Other	No report
Total, all fields	4,700	3,300	8,000	500	300	4,700	100
Business and Industry	600	2,300	5,100	500	S	3,600	S
Industry	600	2,200	5,000	300	S	3,000	S
Self employed	S	100	100	100	S	700	S
Educ inst, total	3,700	100	800	S	S	100	S
4-yr college/univ.	900	100	600	S	S	100	S
Other	2,800	S	100	S	S	100	S
Nonprofit orgs	S	S	200	S	S	S	S
Federal Government	100	200	500	S	S	500	S
State/local govt	S	100	1,000	S	S	100	S
Other	200	600	400	S	200	300	S
Total sciences	4,400	1,500	6,600	200	300	2,800	S
Business and Industry	600	1,100	4,000	200	S	1,900	S
Industry	600	1,000	3,900	100	S	1,300	S
Self employed	S	100	100	100	S	600	S
Educ inst, total	3,600	100	700	S	S	100	S
4-yr college/univ.	900	100	600	S	S	100	S
Other	2,700	S	100	S	S	100	S
Nonprofit orgs	S	S	200	S	S	S	S
Federal Government	100	100	400	S	S	400	S
State/local govt	S	100	1,000	S	S	100	S
Other	100	200	300	S	200	200	S
Physical sciences	600	300	100	S	S	200	S
Business and Industry	100	200	S	S	S	100	S
Industry	100	200	S	S	S	100	S
Self employed	S	S	S	S	S	S	S
Educ inst, total	500	S	S	S	S	S	S
4-yr college/univ.	200	S	S	S	S	S	S
Other	300	S	S	S	S	S	S
Nonprofit orgs	S	S	S	S	S	S	S
Federal Government	S	S	S	S	S	S	S
State/local govt	S	S	S	S	S	S	S
Other	S	S	S	S	S	S	S
Math/statistics	1,200	200	900	S	S	100	S
Business and Industry	S	200	700	S	S	100	S
Industry	S	200	700	S	S	100	S
Self employed	S	S	S	S	S	S	S
Educ inst, total	1,200	S	100	S	S	S	S
4-yr college/univ.	300	S	S	S	S	S	S
Other	900	S	S	S	S	S	S
Nonprofit orgs	S	S	S	S	S	S	S
Federal Government	S	S	S	S	S	S	S
State/local govt	S	S	S	S	S	S	S
Other	S	S	S	S	S	S	S
Computer science	400	300	3,600	100	S	300	S
Business and Industry	100	200	2,800	100	S	300	S
Industry	100	200	2,800	100	S	300	S
Self employed	S	S	S	100	S	S	S
Educ inst, total	200	S	200	S	S	S	S
4-yr college/univ.	100	S	100	S	S	S	S
Other	100	S	S	S	S	S	S
Nonprofit orgs	S	S	100	S	S	S	S
Federal Government	S	S	100	S	S	S	S
State/local govt	S	S	100	S	S	S	S
Other	100	100	200	S	S	S	S

See explanatory information and SOURCE at end of table.

Table B-40. 1989 science and engineering (S&E) master's-degree recipients employed in S&E occupations, by field of degree, type of employer, and primary work activity: 1990

Field of degree	Employed in S&E occupation	Primary work activity						
		Research and development				Management/administration		
		Total	Basic	Applied	Develop-ment	Total	Of R&D	Of non-R&D
Environ science	1,800	500	100	300	100	200	100	100
Business and Industry	1,200	300	S	200	100	100	S	S
Industry	1,100	300	S	200	100	100	S	S
Self employed	S	S	S	S	S	S	S	S
Educ inst, total	200	100	100	S	S	S	S	S
4-yr college/univ.	200	100	100	S	S	S	S	S
Other	S	S	S	S	S	S	S	S
Nonprofit orgs	S	S	S	S	S	S	S	S
Federal Government	200	100	S	100	S	S	S	S
State/local govt	200	S	S	S	S	S	S	S
Other	100	S	S	S	S	S	S	S
Life sciences	4,400	1,600	500	900	200	500	100	400
Business and Industry	1,100	500	100	200	200	100	S	100
Industry	1,000	500	100	200	200	100	S	100
Self employed	200	S	S	S	S	S	S	S
Educ inst, total	1,700	700	400	300	S	100	S	S
4-yr college/univ.	800	500	300	200	S	100	S	S
Other	900	200	100	100	S	S	S	S
Nonprofit orgs	100	100	S	100	S	S	S	S
Federal Government	500	100	S	100	S	100	S	100
State/local govt	600	200	S	200	S	200	S	200
Other	400	100	S	100	S	S	S	S
Psychology	1,300	200	S	S	100	100	S	100
Business and Industry	700	S	S	S	S	100	S	100
Industry	700	S	S	S	S	100	S	100
Educ inst, total	300	S	S	S	S	S	S	S
4-yr college/univ.	200	S	S	S	S	S	S	S
Other	100	S	S	S	S	S	S	S
Nonprofit orgs	S	S	S	S	S	S	S	S
Federal Government	100	100	S	S	100	S	S	S
Other	200	S	S	S	S	S	S	S
Social sciences	4,800	800	200	500	100	700	100	600
Business and Industry	1,400	200	S	100	100	300	S	300
Industry	800	200	S	100	100	300	S	300
Self employed	600	S	S	S	S	S	S	S
Educ inst, total	1,500	300	200	100	S	100	S	100
4-yr college/univ.	900	300	200	100	S	100	S	100
Other	600	S	S	S	S	S	S	S
Nonprofit orgs	200	100	S	100	S	100	S	S
Federal Government	700	100	S	100	S	100	S	100
State/local govt	800	100	S	100	S	100	S	100
Other	100	S	S	S	S	S	S	S
Total engineering	16,100	8,600	200	1,200	7,100	1,800	1,000	800
Business and Industry	12,400	6,900	100	600	6,200	1,100	500	600
Industry	12,200	6,900	100	600	6,200	1,100	500	600
Self employed	200	S	S	S	S	S	S	S
Educ inst, total	500	300	100	100	100	100	100	S
4-yr college/univ.	500	300	100	100	100	100	100	S
Other	100	S	S	S	S	S	S	S
Nonprofit orgs	S	S	S	S	S	S	S	S
Federal Government	1,400	800	100	300	400	300	200	100
State/local govt	600	300	S	200	100	100	S	100
Other	1,200	300	S	100	200	200	200	S

See explanatory information and SOURCE at end of table.

Table B-40. 1989 science and engineering (S&E) master's-degree recipients employed in S&E occupations, by field of degree, type of employer, and primary work activity: 1990

Field of degree	Primary work activity						
	Teaching	Production/ inspection	Reporting/ stat work/ computing	Sales	Profes- sional services	Other	No report
Environ science	100	300	300	S	S	500	S
Business and Industry	S	300	200	S	S	400	S
Industry	S	300	200	S	S	400	S
Self employed	S	S	S	S	S	S	S
Educ inst, total	100	S	S	S	S	S	S
4-yr college/univ.	S	S	S	S	S	S	S
Other	S	S	S	S	S	S	S
Nonprofit orgs	S	S	S	S	S	S	S
Federal Government	S	S	S	S	S	S	S
State/local govt	S	S	100	S	S	S	S
Other	S	S	S	S	S	S	S
Life sciences	900	500	500	S	100	400	S
Business and Industry	S	200	100	S	S	200	S
Industry	S	100	100	S	S	200	S
Self employed	S	100	S	S	S	S	S
Educ inst, total	800	100	100	S	S	S	S
4-yr college/univ.	100	100	100	S	S	S	S
Other	700	S	S	S	S	S	S
Nonprofit orgs	S	S	S	S	S	S	S
Federal Government	S	100	100	S	S	S	S
State/local govt	S	S	100	S	S	S	S
Other	S	S	S	S	100	100	S
Psychology	500	S	100	S	200	200	S
Business and Industry	300	S	100	S	S	100	S
Industry	300	S	100	S	S	100	S
Educ inst, total	100	S	S	S	S	100	S
4-yr college/univ.	100	S	S	S	S	100	S
Other	S	S	S	S	S	S	S
Nonprofit orgs	S	S	S	S	S	S	S
Federal Government	S	S	S	S	S	S	S
Other	S	S	S	S	100	S	S
Social sciences	800	100	1,300	S	S	1,100	S
Business and Industry	S	100	100	S	S	700	S
Industry	S	100	100	S	S	100	S
Self employed	S	S	S	S	S	600	S
Educ inst, total	700	S	400	S	S	S	S
4-yr college/univ.	100	S	300	S	S	S	S
Other	600	S	S	S	S	S	S
Nonprofit orgs	S	S	S	S	S	S	S
Federal Government	S	S	100	S	S	300	S
State/local govt	S	S	600	S	S	S	S
Other	S	S	S	S	S	S	S
Total engineering	300	1,300	1,400	300	S	1,900	S
Business and Industry	S	1,200	1,100	300	S	1,700	S
Industry	S	1,200	1,100	200	S	1,700	S
Self employed	S	S	S	100	S	S	S
Educ inst, total	100	S	S	S	S	S	S
4-yr college/univ.	100	S	S	S	S	S	S
Other	100	S	S	S	S	S	S
Nonprofit orgs	S	S	S	S	S	S	S
Federal Government	S	100	100	S	S	100	S
State/local govt	S	S	100	S	S	S	S
Other	100	400	100	S	S	100	S

KEY: S = Data suppressed for statistical reasons

NOTES: Because of rounding, components may not add to totals.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table 8-41. Median annual salaries of 1988 and 1989 science and engineering (S&E) bachelor's-degree recipients, by field of degree, S&E employment status, sex, and racial/ethnic group: 1990

Field of degree and S&E employment status	Total	Sex		Racial/ethnic group				
		Men	Women	White	Black	Asian	Native American	Hispanic 1/
Total, all fields	$26,000	$29,500	$21,600	$26,100	$24,000	$30,000	$21,900	$25,100
S&E occupation	30,000	30,600	24,600	30,000	26,100	31,800	30,000	28,000
Non-S&E occupation	21,400	24,000	20,000	21,100	23,000	23,000	M	24,000
Total sciences	23,000	25,100	20,100	23,000	22,200	27,900	M	21,100
S&E occupation	25,000	26,900	21,900	25,000	22,600	30,000	M	21,000
Non-S&E occupation	21,100	23,500	20,000	20,800	22,000	21,900	M	23,900
Physical sciences	25,100	26,500	24,900	25,000	M	M	M	24,000
S&E occupation	26,000	26,900	25,000	25,100	M	M	M	23,000
Non-S&E occupation	25,000	25,600	22,000	25,000	M	M	M	M
Chemistry	25,100	27,000	23,600	25,000	M	M	M	M
S&E occupation	25,500	27,200	23,900	25,100	M	M	M	M
Non-S&E occupation	25,000	26,600	22,000	25,000	M	M	M	M
Physics/astronomy	28,000	28,200	M	27,500	M	M	M	M
S&E occupation	29,000	30,000	M	28,500	M	M	M	M
Non-S&E occupation	M	M	M	M	M	M	M	M
Other phys sciences	25,000	25,000	M	25,000	M	M	M	M
S&E occupation	21,100	M	M	21,100	M	M	M	M
Non-S&E occupation	M	M	M	M	M	M	M	M
Math/statistics	23,600	24,000	23,000	24,000	M	M	M	M
S&E occupation	25,000	25,800	24,000	25,000	M	M	M	M
Non-S&E occupation	20,300	22,400	17,000	20,700	M	M	M	M
Computer science	30,100	30,600	30,000	30,100	28,000	33,200	M	30,000
S&E occupation	30,300	31,000	29,500	30,500	30,000	32,800	M	30,000
Non-S&E occupation	27,900	27,900	30,600	27,000	M	M	M	M
Environ science	23,700	24,000	22,900	23,600	M	M	M	M
S&E occupation	23,900	24,000	23,000	23,900	M	M	M	M
Non-S&E occupation	18,000	M	M	18,000	M	M	M	M
Life sciences	21,000	23,000	19,600	21,000	20,100	M	M	M
S&E occupation	21,000	22,600	20,000	21,000	M	M	M	M
Non-S&E occupation	20,200	24,000	18,300	20,100	M	M	M	M
Biology	20,500	22,500	20,000	21,000	M	M	M	M
S&E occupation	20,600	21,900	20,100	21,000	M	M	M	M
Non-S&E occupation	20,100	24,000	19,700	20,200	M	M	M	M
Agr science	21,100	24,000	18,000	20,900	M	M	M	M
S&E occupation	21,900	24,000	19,100	21,100	M	M	M	M
Non-S&E occupation	21,000	24,500	16,600	18,900	M	M	M	M
Psychology	18,600	21,300	18,000	18,600	M	M	M	M
S&E occupation	18,200	26,000	17,800	18,000	M	M	M	M
Non-S&E occupation	19,000	20,000	18,300	19,000	M	M	M	M
Social sciences	21,900	23,900	20,100	21,500	21,900	M	M	M
S&E occupation	22,000	24,500	21,000	22,100	M	M	M	M
Non-S&E occupation	21,500	23,000	20,100	21,100	23,500	M	M	M
Economics	25,000	25,100	21,100	24,000	M	M	M	M
S&E occupation	25,000	25,500	M	25,000	M	M	M	M
Non-S&E occupation	24,000	25,000	22,900	23,500	M	M	M	M
Socio/anthro	20,800	21,100	20,500	19,000	M	M	M	M
S&E occupation	21,500	M	M	M	M	M	M	M
Non-S&E occupation	20,600	21,100	20,000	18,900	M	M	M	M
Other soc sciences	20,800	21,500	20,000	20,100	M	M	M	M
S&E occupation	21,000	21,000	21,000	21,100	M	M	M	M
Non-S&E occupation	20,100	21,900	20,000	20,000	M	M	M	M

See explanatory information and SOURCE at end of table.

Table 8-41. Median annual salaries of 1988 and 1989 science and engineering (S&E) bachelor's-degree recipients, by field of degree, S&E employment status, sex, and racial/ethnic group: 1990

Field of degree and S&E employment status	Total	Sex		Racial/ethnic group				
		Men	Women	White	Black	Asian	Native American	Hispanic 1/
Total engineering	$33,000	$33,000	$33,800	$33,300	$32,500	$32,800	M	$32,200
S&E occupation	33,300	33,000	33,900	33,500	32,400	32,200	M	32,500
Non-S&E occupation	32,000	32,100	31,800	32,100	M	M	M	M
Aero/astro	34,800	34,400	M	34,900	M	M	M	M
S&E occupation	35,000	34,900	M	35,000	M	M	M	M
Non-S&E occupation	M	M	M	M	M	M	M	M
Chemical	35,100	35,100	35,100	35,200	M	M	M	M
S&E occupation	35,200	35,000	35,300	35,300	M	M	M	M
Non-S&E occupation	34,900	M	M	34,800	M	M	M	M
Civil	30,100	30,100	31,100	30,000	M	33,600	M	32,900
S&E occupation	30,300	30,100	31,100	30,100	M	33,600	M	32,900
Non-S&E occupation	28,800	28,000	M	28,800	M	M	M	M
Elect/electron	34,000	34,000	33,900	34,300	32,900	33,300	M	M
S&E occupation	34,000	34,000	33,900	34,300	32,900	33,400	M	M
Non-S&E occupation	33,900	33,900	M	34,000	M	M	M	M
Industrial	31,100	30,600	32,700	31,500	27,000	M	M	28,000
S&E occupation	31,500	31,000	32,900	31,800	27,000	M	M	28,000
Non-S&E occupation	27,000	25,700	M	26,900	M	M	M	M
Materials	33,200	33,800	31,600	32,900	M	M	M	M
S&E occupation	33,600	33,800	32,900	33,300	M	M	M	M
Non-S&E occupation	M	M	M	M	M	M	M	M
Mechanical	34,000	33,800	35,000	34,000	M	M	M	M
S&E occupation	34,200	33,900	35,000	34,300	M	M	M	M
Non-S&E occupation	33,000	32,900	M	32,900	M	M	M	M
Mining	30,100	31,000	M	31,000	M	M	M	M
S&E occupation	31,000	31,000	M	31,000	M	M	M	M
Non-S&E occupation	M	M	M	M	M	M	M	M
Nuclear	33,300	34,000	31,600	33,000	M	M	M	M
S&E occupation	35,000	34,400	37,400	35,000	M	M	M	M
Non-S&E occupation	M	M	M	M	M	M	M	M
Petroleum	36,600	36,500	38,700	36,600	M	M	M	M
S&E occupation	36,600	36,500	M	36,600	M	M	M	M
Non-S&E occupation	M	M	M	M	M	M	M	M
Other engineering	30,000	30,000	30,100	30,100	M	M	M	M
S&E occupation	30,000	30,000	30,000	30,100	M	M	M	M
Non-S&E occupation	28,300	25,100	M	29,500	M	M	M	M

1/ Includes members of all racial groups

KEY: M = No median computed for groups with fewer than 20 individuals reporting salary

NOTES: Median salaries computed only for full-time employed civilians.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-42. Median annual salaries of 1988 and 1989 science and engineering bachelor's-degree recipients, by field of degree and type of employer: 1990

Field of degree	Total	Business and industry			Educational institutions			Non profit orgs	Federal Govern-ment	State/ local govern-ments	Other	No report
		Total	Industry	Self-employed	Total	4-yr college univ	Other					
Total, all fields.....	$26,000	$29,000	$29,000	$22,500	$20,100	$20,000	$21,000	$18,000	$30,000	$23,600	$19,900	M
Total sciences.....	23,000	25,100	25,100	23,900	20,000	18,500	21,000	18,000	24,400	22,000	19,100	M
Physical sciences.....	25,100	27,500	27,500	M	21,100	M	21,000	M	M	M	M	M
Chemistry.....	25,100	26,900	26,900	M	20,500	M	M	M	M	M	M	M
Physics/astronomy.....	28,000	30,000	30,000	M	M	M	M	M	M	M	M	M
Other phys sciences...	25,000	27,900	27,900	M	M	M	M	M	M	M	M	M
Math/statistics.....	23,600	26,600	26,700	M	20,100	M	20,100	M	M	M	M	M
Computer science.....	30,100	30,600	30,500	M	26,000	26,000	M	M	30,500	24,500	30,000	M
Environ science.....	23,700	24,300	24,400	M	M	M	M	M	M	M	M	M
Life sciences.....	21,000	22,900	23,000	21,000	19,000	17,000	21,000	20,000	20,600	18,000	20,000	M
Biology.....	20,500	23,000	23,500	M	19,000	M	19,800	M	M	M	20,000	M
Agr science.....	21,100	22,300	22,300	20,100	18,000	M	M	M	21,000	18,000	19,000	M
Psychology.....	18,600	20,800	20,700	M	20,100	M	21,700	16,900	M	M	17,900	M
Social sciences.....	21,900	23,000	23,000	M	19,000	M	20,000	19,000	22,800	21,900	19,000	M
Economics.....	25,000	24,000	24,000	M	M	M	M	M	M	M	M	M
Socio/anthro.....	20,800	20,500	20,500	M	M	M	M	M	M	M	M	M
Other soc sciences....	20,800	21,500	21,500	M	M	M	M	M	M	21,900	M	M
Total engineering.....	33,000	33,000	33,100	20,100	29,000	32,000	M	M	36,800	30,600	32,800	M
Aero/astro.....	34,800	34,900	34,900	M	M	M	M	M	34,900	M	M	M
Chemical.....	35,100	35,400	35,400	M	M	M	M	M	M	M	M	M
Civil.....	30,100	30,000	30,100	M	M	M	M	M	32,100	30,300	M	M
Elect/electron.....	34,000	34,000	34,000	M	M	M	M	M	38,400	M	M	M
Industrial.....	31,100	31,100	31,100	M	M	M	M	M	31,800	M	M	M
Materials.....	33,200	33,900	33,900	M	M	M	M	M	M	M	M	M
Mechanical.....	34,000	34,000	34,000	M	M	M	M	M	38,400	M	M	M
Mining.....	30,100	30,100	30,100	M	M	M	M	M	M	M	M	M
Nuclear.....	33,300	34,000	34,000	M	M	M	M	M	37,200	M	M	M
Petroleum.....	36,600	36,900	36,900	M	M	M	M	M	M	M	M	M
Other engineering.....	30,000	30,000	30,100	M	M	M	M	M	M	M	M	M

KEY: M = No median computed for groups with fewer than 20 individuals reporting salary

NOTES: Median salaries computed only for full-time employed civilians.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-43. Median annual salaries of 1988 and 1989 science and engineering bachelor's-degree recipients, by field of degree and primary work activity: 1990

Field of degree	Total	Research and development				Management/administration		
		Total	Basic	Applied	Develop-ment	Total	Of R&D	Of non-R&D
Total, all fields	$26,000	$31,100	$19,800	$23,900	$32,900	$25,000	$30,000	$24,100
Total sciences	23,000	25,000	18,000	21,100	31,000	22,900	25,000	22,600
Physical sciences	25,100	28,000	21,200	27,600	28,600	30,000	30,000	30,700
Chemistry	25,100	26,900	21,200	25,100	28,000	29,500	20,500	29,500
Physics/astronomy	28,000	35,000	25,100	34,800	36,400	29,000	M	29,000
Other phys sciences	25,000	27,600	26,300	18,400	37,900	51,100	30,000	51,100
Math/statistics	23,600	29,500	18,000	23,100	31,200	21,900	21,100	21,900
Computer science	30,100	33,800	30,000	33,900	33,900	30,100	33,300	30,100
Environ science	23,700	24,000	32,400	24,000	18,000	25,000	40,100	23,500
Life sciences	21,000	20,000	17,900	20,200	24,000	21,000	25,000	20,100
Biology	20,500	20,000	17,900	20,600	20,100	18,000	18,000	18,200
Agr science	21,100	23,500	21,100	17,500	30,000	21,100	30,000	20,700
Psychology	18,600	23,500	26,500	20,100	24,100	21,300	30,000	21,300
Social sciences	21,900	21,500	26,500	21,400	20,200	22,800	24,000	22,800
Economics	25,000	22,500	23,700	20,100	25,000	23,200	25,100	23,000
Socio/anthro	20,800	23,200	M	20,300	26,600	22,000	28,000	21,900
Other soc sciences	20,800	20,800	26,600	21,400	18,000	22,000	19,700	22,000
Total engineering	33,000	34,000	35,000	35,900	33,900	34,000	37,200	33,300
Aero/astro	34,800	37,900	34,900	36,700	38,000	25,000	37,200	25,000
Chemical	35,100	35,900	33,800	33,000	36,000	33,900	34,800	32,100
Civil	30,100	30,100	38,500	30,500	30,000	32,300	31,000	32,600
Elect/electron	34,000	34,700	35,600	38,000	34,200	37,300	39,100	34,100
Industrial	31,100	30,700	26,900	31,400	30,700	32,600	34,900	32,400
Materials	33,200	32,900	36,700	30,000	33,000	34,800	M	34,800
Mechanical	34,000	34,000	30,000	35,900	33,900	34,800	43,800	34,000
Mining	30,100	32,500	38,000	38,500	30,100	31,000	50,000	31,000
Nuclear	33,300	35,000	M	37,500	33,000	28,800	31,600	23,500
Petroleum	36,600	37,400	37,400	30,100	38,100	31,000	31,100	30,000
Other engineering	30,000	30,700	43,900	33,000	30,100	30,000	27,400	30,500

See explanatory information and SOURCE at end of table.

Table B-43. Median annual salaries of 1988 and 1989 science and engineering bachelor's-degree recipients, by field of degree and primary work activity: 1990

Field of degree	Teaching	Production/ inspection	Reporting/ stat work/ computing	Sales	Profes- sional services	Other	No report
Total, all fields	$20,000	$28,000	$27,900	$21,500	$18,600	$24,500	$32,800
Total sciences	19,900	23,000	26,600	20,100	18,600	21,900	18,000
Physical sciences	21,100	25,000	25,000	25,000	23,000	25,000	M
Chemistry	20,400	25,000	25,000	25,100	23,000	25,000	M
Physics/astronomy	18,000	32,800	21,500	17,500	M	19,800	M
Other phys sciences	21,900	24,000	26,600	25,000	M	27,000	M
Math/statistics	20,100	23,900	27,600	18,500	M	29,000	15,000
Computer science	28,000	30,400	29,000	23,900	23,000	29,000	M
Environ science	21,000	25,000	24,000	26,200	M	22,000	24,000
Life sciences	21,000	22,300	21,900	23,000	25,100	21,100	10,600
Biology	21,000	22,800	20,100	20,000	32,000	24,500	25,500
Agr science	20,100	21,900	21,900	25,800	15,800	19,200	10,600
Psychology	18,000	24,500	21,000	17,000	17,000	16,900	18,000
Social sciences	19,100	20,100	24,500	21,000	18,900	21,400	M
Economics	20,000	22,000	27,400	23,500	M	25,000	M
Socio/anthro	24,000	12,000	20,600	15,500	18,900	20,800	M
Other soc sciences	19,000	20,000	21,900	20,100	16,000	21,100	M
Total engineering	30,100	32,700	32,600	32,100	28,000	32,000	33,000
Aero/astro	10,000	31,300	32,800	79,600	M	34,500	M
Chemical	23,000	35,300	35,000	31,900	M	31,200	M
Civil	M	30,300	30,000	33,900	M	30,000	32,900
Elect/electron	32,100	33,800	33,900	32,900	M	32,000	38,800
Industrial	38,000	30,000	29,000	32,800	M	33,900	33,400
Materials	M	35,100	30,600	32,800	M	32,800	M
Mechanical	30,000	33,800	36,500	31,500	M	35,000	M
Mining	M	30,100	26,600	M	M	31,600	40,100
Nuclear	20,000	34,900	35,900	M	28,000	33,700	M
Petroleum	M	37,600	30,700	34,600	M	32,300	28,000
Other engineering	29,000	30,000	30,000	26,600	M	30,000	M

KEY: M = No median computed for groups with fewer than 20 individuals reporting salary

NOTES: Median salaries computed only for full-time employed civilians.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-44. Median annual salaries of 1988 and 1989 science and engineering (S&E) master's-degree recipients, by field of degree, S&E employment status, sex, and racial/ethnic group: 1990

Field of degree S&E employment status	Total	Sex		Racial/ethnic group				
		Men	Women	White	Black	Asian	Native American	Hispanic 1/
Total, all fields	$37,000	$39,000	$32,800	$37,500	$35,000	$35,900	M	$36,100
S&E occupation	38,000	39,600	33,800	38,400	35,600	36,000	M	40,000
Non-S&E occupation	32,000	32,100	30,100	32,100	25,300	31,100	M	M
Total sciences	33,800	35,400	31,200	34,000	30,100	33,000	M	29,000
S&E occupation	34,900	36,100	32,000	35,000	34,600	33,000	M	41,000
Non-S&E occupation	30,300	31,000	30,000	31,000	M	M	M	M
Physical sciences	34,900	36,000	31,100	35,900	M	32,100	M	M
S&E occupation	35,000	36,400	31,000	36,000	M	32,100	M	M
Non-S&E occupation	31,000	28,000	M	28,000	M	M	M	M
Chemistry	34,000	34,900	33,300	35,000	M	M	M	M
S&E occupation	33,500	34,900	32,100	34,900	M	M	M	M
Non-S&E occupation	M	M	M	M	M	M	M	M
Physics/astronomy	38,000	38,400	M	38,400	M	M	M	M
S&E occupation	38,400	38,500	M	38,500	M	M	M	M
Non-S&E occupation	M	M	M	M	M	M	M	M
Other phys sciences	32,000	35,900	28,700	32,400	M	M	M	M
S&E occupation	33,800	36,400	28,700	35,000	M	M	M	M
Non-S&E occupation	27,000	M	M	26,900	M	M	M	M
Math/statistics	32,800	35,000	30,000	32,800	M	M	M	M
S&E occupation	33,900	34,800	32,100	33,900	M	M	M	M
Non-S&E occupation	24,600	M	M	24,600	M	M	M	M
Computer science	42,100	42,900	40,100	43,900	M	36,000	M	M
S&E occupation	42,200	43,000	40,100	43,900	M	36,000	M	M
Non-S&E occupation	39,100	41,000	M	41,100	M	M	M	M
Environ science	33,800	35,000	31,800	34,300	M	M	M	M
S&E occupation	33,900	35,300	30,200	34,400	M	M	M	M
Non-S&E occupation	25,100	M	M	M	M	M	M	M
Life sciences	26,900	26,900	26,600	26,900	M	M	M	M
S&E occupation	25,300	26,000	25,000	25,700	M	M	M	M
Non-S&E occupation	27,000	27,000	28,000	27,000	M	M	M	M
Biology	26,600	26,000	27,400	26,900	M	M	M	M
S&E occupation	25,000	25,000	25,700	25,000	M	M	M	M
Non-S&E occupation	27,100	M	M	27,000	M	M	M	M
Agr science	27,000	30,000	24,600	27,900	M	M	M	M
S&E occupation	26,900	29,000	23,800	27,900	M	M	M	M
Non-S&E occupation	27,000	M	M	M	M	M	M	M
Psychology	32,000	36,900	32,000	32,100	M	M	M	M
S&E occupation	32,100	M	28,000	32,100	M	M	M	M
Non-S&E occupation	31,000	M	32,400	30,100	M	M	M	M
Social sciences	31,000	30,000	31,200	31,100	M	M	M	M
S&E occupation	30,100	26,000	31,200	31,200	M	M	M	M
Non-S&E occupation	31,000	31,000	30,200	31,000	M	M	M	M
Economics	35,700	35,000	M	42,300	M	M	M	M
S&E occupation	36,000	M	M	M	M	M	M	M
Non-S&E occupation	M	M	M	M	M	M	M	M
Socio/anthro	24,000	M	M	25,000	M	M	M	M
S&E occupation	21,100	M	M	M	M	M	M	M
Non-S&E occupation	M	M	M	M	M	M	M	M
Other soc sciences	30,000	26,000	31,200	31,000	M	M	M	M
S&E occupation	28,900	25,300	32,000	31,100	M	M	M	M
Non-S&E occupation	30,100	31,000	30,000	30,200	M	M	M	M

See explanatory information and SOURCE at end of table.

Table B-44. Median annual salaries of 1988 and 1989 science and engineering (S&E) master's-degree recipients, by field of degree, S&E employment status, sex, and racial/ethnic group: 1990

Field of degree and S&E employment status	Total	Sex		Racial/ethnic group				
		Men	Women	White	Black	Asian	Native American	Hispanic 1/
Total engineering	$41,400	$42,000	$40,100	$42,100	$41,900	$39,100	M	$40,100
S&E occupation	41,100	41,700	40,000	41,500	41,800	39,500	M	39,100
Non-S&E occupation	43,900	46,900	M	48,800	M	M	M	M
Aero/astro	46,500	46,500	M	46,500	M	M	M	M
S&E occupation	46,400	46,400	M	46,400	M	M	M	M
Non-S&E occupation	M	M	M	M	M	M	M	M
Chemical	40,200	40,600	38,100	41,000	M	39,100	M	M
S&E occupation	40,200	40,500	37,800	41,000	M	39,200	M	M
Non-S&E occupation	M	M	M	M	M	M	M	M
Civil	35,200	35,200	35,600	35,900	M	30,800	M	M
S&E occupation	35,300	35,300	35,600	35,900	M	31,000	M	M
Non-S&E occupation	M	M	M	M	M	M	M	M
Elect/electron	46,500	46,700	M	47,900	M	41,000	M	M
S&E occupation	45,800	46,000	M	46,800	M	41,000	M	M
Non-S&E occupation	M	M	M	M	M	M	M	M
Industrial	40,300	40,200	40,400	42,000	M	M	M	M
S&E occupation	40,100	40,100	40,000	40,000	M	M	M	M
Non-S&E occupation	43,000	43,100	M	M	M	M	M	M
Materials	41,300	40,400	42,200	41,400	M	40,100	M	M
S&E occupation	41,500	41,000	42,200	42,000	M	40,100	M	M
Non-S&E occupation	M	M	M	M	M	M	M	M
Mechanical	42,100	42,100	M	42,100	M	M	M	M
S&E occupation	42,100	42,100	M	42,000	M	M	M	M
Non-S&E occupation	M	M	M	M	M	M	M	M
Mining	37,300	37,500	M	37,300	M	M	M	M
S&E occupation	37,500	37,900	M	37,500	M	M	M	M
Non-S&E occupation	M	M	M	M	M	M	M	M
Nuclear	40,200	40,100	.	40,400	M	M	M	M
S&E occupation	40,100	40,000	M	40,200	M	M	M	M
Non-S&E occupation	M	M	M	M	M	M	M	M
Petroleum	40,800	41,100	M	40,900	M	M	M	M
S&E occupation	40,600	40,900	M	40,900	M	M	M	M
Non-S&E occupation	M	M	M	M	M	M	M	M
Other engineering	39,000	39,900	37,000	39,000	M	40,000	M	M
S&E occupation	38,800	39,600	37,000	39,000	M	40,000	M	M
Non-S&E occupation	40,000	40,000	M	39,900	M	M	M	M

KEY: M = No median computed for groups with fewer than 20 individuals reporting salary

NOTES: Median salaries computed only for full-time employed civilians.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table 8-45. Median annual salaries of 1988 and 1989 science and engineering master's-degree recipients, by field of degree and type of employer: 1990

Field of degree	Total	Business and industry			Educational institutions			Non-profit orgs	Federal Govern-ment	State/ local govern-ments	Other	No report
		Total	Industry	Self-employed	Total	4-yr college univ	Other					
Total, all fields.....	$37,000	$40,100	$40,100	$48,000	$26,100	$26,300	$26,100	$28,000	$36,000	$28,900	$30,200	M
Total sciences.....	33,800	39,000	38,400	48,000	26,000	25,100	26,000	27,000	32,100	26,000	29 000	M
Physical sciences.....	34,900	36,900	36,900	M	27,900	23,500	28,600	M	36,600	M	35,900	M
Chemistry.....	34,000	35,900	[illegible]	M	26,100	M	M	M	M	M	M	M
Physics/astronomy.....	38,000	42,400	42,[illegible]	M	29,000	29,700	M	M	M	M	M	M
Other phys sciences...	32,000	38,000	37,9[illegible]	M	28,000	M	28,500	M	M	M	M	M
Math/statistics..... ...	32,800	42,000	42,000	M	24,500	25,000	24,500	M	M	M	M	M
Computer science.....	42,100	42,200	42,200	M	35,000	37,700	34,900	M	M	M	M	M
Environ science.....	33,800	36,100	36,800	M	22,000	21,100	M	M	30,000	29,900	M	M
Life sciences.....	26,900	28,400	28,000	M	24,000	24,000	23,600	M	30,000	24,000	25,700	M
Biology.....	26,600	27,000	27,000	M	25,100	25,100	25,000	M	M	M	M	M
Agr science.....	27,000	33,900	33,900	M	22,000	22,400	M	M	29,300	M	M	M
Psychology.....	32,000	37,000	37,000	M	M	M	M	M	M	M	M	M
Social sciences.....	31,000	35,000	32,400	M	26,000	28,000	24,000	M	25,300	29,000	M	M
Economics.....	35,700	35,000	35,100	M	M	M	M	M	M	M	M	M
Socio/anthro.....	24,000	M	M	M	M	M	M	M	M	M	M	M
Other soc sciences....	30,000	32,100	31,000	M	24,200	M	24,000	M	M	M	M	M
Total engineering.....	41,400	41,400	41,400	M	36,200	36,100	40,000	45,000	44,100	34,800	40,900	M
Aero/astro.....	46,500	46,500	46,500	M	M	M	M	M	M	M	M	M
Chemical.....	40,200	40,200	40,200	M	M	M	M	M	M	M	M	M
Civil.....	35,200	35,000	35,000	M	M	M	M	M	M	34,900	M	M
Elect/electron.....	46,500	45,800	46,400	M	M	M	M	M	M	M	M	M
Industrial.....	40,300	40,100	40,100	M	M	M	M	M	M	M	M	M
Materials.....	41,300	42,000	42,000	M	M	M	M	M	M	M	M	M
Mechanical.....	42,100	42,100	42,000	M	M	M	M	M	M	M	M	M
Mining.....	37,300	37,400	37,400	M	M	M	M	M	M	M	M	M
Nuclear.....	40,200	40,700	40,700	M	M	M	M	M	M	M	M	M
Petroleum.....	40,800	40,900	40,900	M	M	M	M	M	M	M	M	M
Other engineering.....	39,000	39,600	39,800	M	M	M	M	M	43,000	34,000	M	M

KEY: M = No median computed for groups with fewer than 20 individuals reporting salary

NOTES: Median salaries computed only for full-time employed civilians.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table B-46. Median annual salaries of 1988 and 1989 science and engineering master's-degree recipients, by field of degree and primary work activity: 1990

Field of degree	Total	Research and development				Management/administration		
		Total	Basic	Applied	Develop-ment	Total	Of R&D	Of non-R&D
Total, all fields.....	$37,000	$40,200	$31,000	$36,600	$42,100	$40,000	$46,000	$35,400
Total sciences.....	33,800	36,400	25,000	32,100	41,000	35,000	44,800	32,400
Physical sciences.....	34,900	36,000	32,500	35,900	38,000	38,000	M	40,100
Chemistry.....	34,000	34,900	M	35,900	32,500	M	M	M
Physics/astronomy.....	38,000	39,900	M	M	42,100	M	M	M
Other phys sciences...	32,000	39,600	M	42,500	M	40,100	M	M
Math/statistics.....	32,800	42,800	M	M	42,700	53,900	M	M
Computer science.....	42,100	43,000	M	M	42,500	48,000	47,600	48,100
Environ science.....	33,800	30,000	22,000	32,100	30,100	35,900	M	35,900
Life sciences.....	26,900	27,900	24,900	26,100	35,900	25,100	M	25,000
Biology.....	26,600	27,000	24,900	27,000	M	M	M	M
Agr science.....	27,000	29,700	M	23,000	35,000	26,900	M	25,800
Psychology.....	32,000	M	M	M	M	32,800	M	M
Social sciences.....	31,000	32,000	M	32,000	M	31,000	M	31,100
Economics.....	35,700	M	M	M	M	M	M	M
Socio/anthro.....	24,000	M	M	M	M	M	M	M
Other soc sciences....	30,000	M	M	M	M	30,000	M	30,000
Total engineering.....	41,400	42,200	42,200	40,900	42,300	48,900	51,200	47,700
Aero/astro.....	46,500	46,400	M	M	M	M	M	M
Chemical.....	40,200	40,100	M	39,000	40,200	47,100	M	M
Civil.....	35,200	34,200	M	M	33,500	40,000	M	40,100
Elect/electron.....	46,500	47,900	M	M	48,000	53,600	M	M
Industrial.....	40,300	40,400	M	M	40,400	43,900	M	42,200
Materials.....	41,300	42,100	M	42,700	42,100	47,900	M	M
Mechanical.....	42,100	42,100	M	M	41,500	M	M	M
Mining.....	37,300	M	M	M	M	M	M	M
Nuclear.....	40,200	40,200	M	M	42,200	M	M	M
Petroleum.....	40,800	41,000	M	M	40,400	M	M	M
Other engineering.....	39,000	40,000	M	35,000	40,100	49,100	M	44,900

See explanatory information and SOURCE at end of table.

Table B-46. Median annual salaries of 1988 and 1989 science and engineering master's-degree recipients, by field of degree and primary work activity: 1990

Field of degree	Teaching	Production/ inspection	Reporting/ stat work/ computing	Sales	Profes- sional services	Other	No report
Total, all fields.....	$26,100	$38,500	$37,000	$33,000	M	$34,900	M
Total sciences.....	26,000	36,000	36,100	32,000	M	32,100	M
Physical sciences.....	28,700	37,900	28,000	M	M	32,600	M
Chemistry.....	M	36,100	M	M	M	M	M
Physics/astronomy.....	M	M	M	M	M	M	M
Other phys sciences...	28,200	M	M	M	M	36,100	M
Math/statistics.....	24,500	M	35,500	M	M	M	M
Computer science.....	34,900	M	40,000	M	M	41,200	M
Environ science.....	M	39,100	32,100	M	M	33,900	M
Life sciences.....	26,000	23,800	24,700	M	M	27,000	M
Biology.....	26,000	M	M	M	M	M	M
Agr science.....	M	M	M	M	M	M	M
Psychology.....	M	M	M	M	M	M	M
Social sciences.....	24,000	M	31,200	M	M	25,300	M
Economics.....	M	M	M	M	M	M	M
Socio/anthro.....	M	M	M	M	M	M	M
Other soc sciences....	26,000	M	M	M	M	M	M
Total engineering.....	40,500	40,100	40,000	36,100	M	36,400	M
Aero/astro.....	M	M	M	M	M	M	M
Chemical.....	M	40,100	M	M	M	M	M
Civil.....	M	M	35,300	M	M	35,700	M
Elect/electron.....	M	M	M	M	M	M	M
Industrial.....	M	36,800	M	M	M	M	M
Materials.....	M	40,000	M	M	M	M	M
Mechanical.....	M	42,100	M	M	M	M	M
Mining.....	M	37,500	M	M	M	32,900	M
Nuclear.....	M	40,300	M	M	M	M	M
Petroleum.....	M	40,700	M	M	M	M	M
Other engineering.....	M	40,200	38,200	M	M	35,100	M

KEY: M = No median computed for groups with fewer than 20 individuals reporting salary

NOTES: Median salaries computed only for full-time employed civilians.
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Table 8-47. Selected employment characteristics of 1988 and 1989 science and engineering bachelor's- and master's-degree recipients, by field of degree and sex: 1990

Field of degree and sex	Labor force participation rate		Unemployment rate		In-field employment rate	
	Bachelor's	Master's	Bachelor's	Master's	Bachelor's	Master's
Total, all fields	97.4	97.1	3.4	1.8	37.8	59.0
Men	98.2	98.5	3.5	1.5	42.7	57.6
Women	96.1	93.9	3.3	2.7	29.9	62.4
Total sciences	96.9	96.9	3.7	1.9	33.2	59.6
Men	97.7	98.8	4.0	1.5	38.0	57.1
Women	95.9	94.0	3.4	2.6	27.7	63.7
Physical sciences	97.0	97.9	5.0	2.1	35.6	43.4
Men	97.3	98.5	6.0	2.1	33.9	41.7
Women	96.5	R	2.8	R	39.1	R
Chemistry	97.1	96.8	4.9	1.9	51.9	57.3
Men	97.0	R	7.5	R	51.9	R
Women	97.1	R	1.2	R	51.8	R
Physics/astronomy	96.3	97.9	5.7	2.2	8.8	27.7
Men	96.7	98.3	6.7	2.2	9.3	28.4
Women	R	R	R	R	R	R
Other phys sciences	98.3	R	4.0	R	27.0	R
Men	99.3	R	R	R	36.4	R
Women	R	R	R	R	R	R
Math/statistics	96.7	98.1	4.1	1.1	39.6	57.4
Men	98.7	99.6	3.1	1.5	31.7	53.3
Women	94.8	95.9	5.2	0.5	47.9	63.1
Computer science	98.3	98.2	2.5	1.5	81.5	77.2
Men	98.9	99.3	2.4	0.8	79.7	73.0
Women	96.7	95.3	2.6	3.2	86.5	88.8
Environ science	97.2	99.8	4.8	2.7	56.1	69.4
Men	97.2	99.7	4.5	2.7	57.3	71.5
Women	R	R	R	R	R	R
Life sciences	96.0	96.5	4.6	2.1	38.4	59.0
Men	97.8	98.0	4.3	2.1	40.4	52.5
Women	94.3	95.0	4.8	2.1	36.5	65.9
Biology	95.1	98.5	6.1	1.9	40.2	60.2
Men	96.9	99.9	6.4	0.4	39.4	50.8
Women	93.8	97.5	5.9	2.9	40.9	67.0
Agr science	97.7	93.6	1.6	2.5	35.1	57.1
Men	99.0	96.2	1.4	3.7	41.8	54.1
Women	95.8	88.6	1.8	R	24.7	63.2
Psychology	96.1	97.6	2.9	3.6	9.9	48.1
Men	97.4	100.0	6.9	2.5	9.4	41.0
Women	95.5	96.3	1.0	4.2	10.1	52.3
Social sciences	97.1	93.4	4.0	2.1	14.1	43.5
Men	96.9	97.5	3.8	1.2	16.6	38.9
Women	97.4	88.5	4.2	3.3	11.2	49.5
Economics	98.3	97.0	2.8	R	13.8	26.6
Men	98.2	98.5	2.9	R	16.6	28.7
Women	98.6	R	2.4	R	7.2	R
Socio/anthro	97.1	95.3	4.8	2.2	8.1	38.8
Men	95.8	R	4.4	R	9.7	R
Women	97.8	R	5.1	R	7.3	R
Other soc sciences	96.2	91.3	4.5	3.1	17.6	52.7
Men	96.0	96.9	4.5	1.2	18.8	44.4
Women	96.5	86.2	4.5	5.0	16.1	61.6

See explanatory information and SOURCE at end of table.

Table B-47. Selected employment characteristics of 1988 and 1989 science and engineering bachelor's- and master's-degree recipients, by field of degree and sex: 1990

Field of degree and sex	Labor force participation rate		Unemployment rate		In-field employment rate	
	Bachelor's	Master's	Bachelor's	Master's	Bachelor's	Master's
Total engineering	98.9	97.5	2.7	1.7	50.7	57.8
Men	99.0	98.1	2.8	1.5	50.9	58.2
Women	98.0	93.1	2.1	3.2	49.8	54.5
Aero/astro	100.0	R	2.5	R	48.9	R
Men	100.0	R	2.7	R	46.7	R
Women	R	R	R	R	R	R
Chemical	95.1	R	2.8	R	49.6	R
Men	93.2	R	4.0	R	51.8	R
Women	99.2	R	0.2	R	45.2	R
Civil	98.6	98.1	2.0	1.4	71.1	69.1
Men	99.3	98.9	2.1	1.6	71.1	70.8
Women	94.8	R	0.9	R	71.3	R
Elect/electron	99.3	95.8	2.6	1.5	53.3	57.7
Men	99.4	96.9	2.6	0.8	53.8	58.6
Women	98.7	R	3.2	R	49.5	R
Industrial	98.9	99.1	4.5	5.9	42.2	26.5
Men	99.4	99.0	5.3	6.3	41.9	27.1
Women	96.9	R	1.5	R	43.5	R
Materials	R	R	R	R	R	R
Men	R	R	R	R	R	R
Women	R	R	R	R	R	R
Mechanical	98.7	99.5	3.0	0.8	44.3	60.4
Men	98.9	99.7	2.8	0.8	43.3	61.1
Women	97.1	R	4.4	R	52.2	R
Mining	R	R	R	R	R	R
Men	R	R	R	R	R	R
Women	R	R	R	R	R	R
Nuclear	R	R	R	R	R	R
Men	R	R	R	R	R	R
Women	R	R	R	R	R	R
Petroleum	R	R	R	R	R	R
Men	R	R	R	R	R	R
Women	R	R	R	R	R	R
Other engineering	99.0	97.4	1.4	1.6	38.6	53.5
Men	98.9	97.4	1.6	1.6	38.6	48.7
Women	99.4	R	0.6	R	38.7	R

KEY: R = No rate computed for groups with fewer than 1,500 individuals in labor force

NOTES: Labor force participation rate = number in labor force as a percentage of total population
Unemployment rate = number of unemployed as a percentage of labor force
In-field employment rate = number employed in field as a percentage of those with degrees in that field
Data exclude those on full-time graduate students.

SOURCE: National Science Foundation/SRS, 1990 New Entrants Survey

Section C. Survey Instrument

STUDY #31-1591-121
SPRING 1990

OMB No.:3145-0077
Expires: December 31, 1991

National Science Foundation
and
U.S. Department of Energy

1990 Survey of Natural and Social Science and Engineering Graduates

This information is solicited under the authority of the National Science Foundation Act of 1950, as amended. All information you provide will be treated as confidential and will be used for statistical purposes only. Information will be released only in the form of statistical summaries from which it will be impossible to identify any particular person. Your response is entirely voluntary and failure to provide some or all of the requested information will not in any way adversely affect you.

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Herman Fleming, National Science Foundation, 1800 G Street, N.W., Washington, D.C. 20550 and to the Office of Management and Budget, Paperwork Reduction Project (OMB No. 3145-0077), Washington, D.C. 20503.

Conducted by:

Institute for Survey Research
Temple University
-Of the Commonwealth System of Higher Education-
Philadelphia, Pennsylvania 19122

INSTRUCTIONS FOR COMPLETING THIS QUESTIONNAIRE

In constructing this questionnaire, we have tried to provide response categories for most answers. If the response categories are not adequate for you to answer a question, please write in your answer.

For most questions, response categories have been provided and you are asked to mark a box. In addition, in some of the questions you are asked to fill in "code numbers" either from the list on the INSERT, or from a preceding question.

An example, with sample answers, is shown below.

• • • • •

1. Do you subscribe to any periodical journals or magazines?

   1. ☒ Yes *(GO TO QUESTION 2)*

   2. ☐ No *(SKIP TO NEXT SECTION)*

2. Which of the following journals or magazines do you receive? (MARK AS MANY AS APPLY)

01.	☒ Newsweek	04.	☒ Science
02.	☒ Time	05.	☐ Scientific American
03.	☐ Life	06.	☐ Other. SPECIFY: _____

3. Which of the journals marked in question 2 most relates to the kind of work you do? (ENTER THE APPROPRIATE CODE NUMBER FROM QUESTION 2)

[0|4]

• • • • •

Please answer all the questions that apply and follow directions which may ask you to skip certain questions. In the absence of instructions, always go to the next question. Even if you feel only part of the questionnaire applies to you, or there are some questions you cannot answer, please answer as many questions as possible and return the entire questionnaire.

We appreciate your participation and thank you for completing this questionnaire. Please go to the next page and answer all applicable questions.

PART I. EDUCATION

1. Please list all undergraduate and graduate degrees, excluding honorary degrees, that have been awarded to you. Refer to the DEGREE AND EMPLOYMENT SPECIALTY LIST on the INSERT for the degree field and code number of the major field. Do NOT include correspondence courses, on-the-job training, apprenticeships, or training at an employer's training school.

If you need more space, attach a separate sheet of paper and give the same type of information for each additional school listed.

1a. TYPE OF DEGREE	1b. UNIVERSITY/ CITY & STATE	1c. MONTH/YEAR GRANTED	1d. MAJOR FIELD/CODE
Bachelor's			
Master's			
Doctorate			
Other, (Specify):			
Other (Specify):			

2. Between January and May 1990, did you attend a college or university?

1. ☐ Yes → 2. ☐ Undergraduate, full-time
   3. ☐ Undergraduate, part-time
   4. ☐ Graduate full-time
   5. ☐ Graduate, part-time

   → *(GO TO QUESTION 2a)*

6. ☐ No *(SKIP TO QUESTION 3)*

2a. What field of study did you pursue?
(ENTER DEGREE FIELD AND CODE FROM DEGREE AND EMPLOYMENT SPECIALTY LIST ON INSERT)

_____ (DESCRIPTION OF DEGREE FIELD)

☐☐☐ (CODE)

☐ Did not pursue any specific field of study

PART II. EMPLOYMENT STATUS

3. During the week of February 4, 1990, were you:

1. ☐ Working full-time (35 hours or more at least in one position)* (SKIP TO QUESTION 7)
2. ☐ Working part-time* (GO TO QUESTION 4)
3. ☐ Not working, but seeking work (SKIP TO QUESTION 6a)
4. ☐ Not working and not seeking work. (SKIP TO QUESTION 5)

*Includes job held while attending school.

4. Were you seeking full-time work?

1. ☐ Yes
2. ☐ No

→ *(SKIP TO QUESTION 7)*

5. Did you look for work at any time during the three weeks **prior** to the week of February 4, 1990, that is, between January 14 and February 3, 1990?

1. ☐ Yes
2. ☐ No

6. What was the **main** reason you were not working or not seeking work during the week of February 4, 1990? (MARK ONLY ONE BOX)

1. ☐ On layoff from a job → *(GO TO QUESTION 7)*
2. ☐ On vacation or otherwise temporarily absent from a job for health or personal reasons → *(GO TO QUESTION 7)*
3. ☐ Retired
4. ☐ Student
5. ☐ Family responsibilities
6. ☐ Chronic illness or permanent disability
7. ☐ Could not find work or believed no jobs available in my particular field
8. ☐ Did not want to work
9. ☐ New job to begin within 30 days
10. ☐ Waiting for school to begin
11. ☐ Other, PLEASE SPECIFY:

→ *(SKIP TO PART III ON PAGE 5)*

6a. If you were unemployed and seeking employment during the week of February 4, 1990, was your job search restricted by (MARK ONLY ONE BOX)

1. ☐ Geographic location
2. ☐ Family responsibilities
3. ☐ Need for part-time employment
4. ☐ Other, PLEASE SPECIFY:
5. ☐ Not restricted

→ *(SKIP TO PART III ON PAGE 5)*

7. During the week of February 4, 1990, were you working at (or on layoff or temporarily absent from) a position related to the natural sciences, social sciences, or engineering?

1. ☐ Yes *(SKIP TO PART III ON PAGE 5)*
2. ☐ No *(GO TO QUESTION 8)*

8. What was the most important reason that you were NOT working at a position related to science or engineering? (MARK ONLY ONE BOX)

1. ☐ Preferred non-science or non-engineering position
2. ☐ Promoted out of science or engineering position
3. ☐ Pay was better in non-science or non-engineering position
4. ☐ Locational preference
5. ☐ Science or engineering position not available
6. ☐ Not trained in a natural science, social science, or engineering field
7. ☐ Other reason, PLEASE SPECIFY:

PART III. EMPLOYMENT PROFILE

☐ If you have never been employed, nor self-employed, please mark this box and SKIP TO QUESTION 26 ON PAGE 9. Otherwise, CONTINUE with the instructions below.

In this part of the questionnaire, we are asking questions about the job you held during the week of February 4, 1990, or your most recent job before February 4th. Please include any employment, including a military service job, not only a scientific or technical job. If you had more than one regular job during the week of February 4th, please list the one which you consider your principal employment

9. For whom did you work? What is the name of the company, business, or the government agency you worked for?

_____ CHECK HERE IF SELF-EMPLOYED ☐

9a. Where were you employed, that is, in what city, county, and state?

_____ (CITY OR TOWN) _____ (COUNTY) _____ (STATE OR FOREIGN COUNTRY)

10 Which of the categories below best describes the type of organization of your principal employment or post-doctoral appointment? (MARK ONLY ONE BOX)

01 ☐ Business or industry
02 ☐ Self-employed → (GO TO QUESTION 11)
03 ☐ Junior college, 2-year college, technical institute
04 ☐ Medical school
05 ☐ 4-year college or university, other than medical school
06 ☐ Elementary or secondary school system
07 ☐ Hospital or clinic
08 ☐ Nonprofit organization, other than hospital, clinic or educational institution
09 ☐ U.S. military service, active duty, or Commissioned Corps, such as USPHS, NOAA, etc
10 ☐ U.S. Government, civilian employee
11 ☐ State government
12 ☐ Local or other government (SPECIFY): _____
13 ☐ International agency
14 ☐ Other (SPECIFY): _____

→ *(SKIP TO QUESTION 12)*

11. If you were employed by business/industry or if you were self-employed, how would you classify the organization listed in question 9?

(PLEASE ENTER CODE FROM EMPLOYER CLASSIFICATION LIST ON THE INSERT IF THE ORGANIZATION CONDUCTS ITS ACTIVITIES AT DIFFERENT LOCATIONS, ENTER THE CODE FOR THE ACTIVITY AT THE LOCATION WHERE YOU ARE EMPLOYED. PLEASE WRITE IN THE TYPE OF ACTIVITY IF IT IS NOT FOUND ON THE LIST.)

(CODE)

TYPE OF ACTIVITY: _____

12 From the activities listed below, select your primary and secondary work activities for your principal job (as reported in question 9) in terms of time devoted for a typical week.

(ENTER THE APPROPRIATE CODE NUMBER 01-16 FOR EACH)

[ ][ ] Primary activity [ ][ ] Secondary Activity

01 Management or administration of research or development

02 Management or administration of other than research and development

03 Teaching and training—preparing and teaching courses, guiding and counseling students or trainees

04 Basic research—that is, study directed toward gaining scientific knowledge primarily for its own sake

05 Applied research—that is, study directed toward gaining scientific knowledge in an effort to meet a recognized need

06 Development—product, process, and technical development. That is, direction of knowledge gained from research toward production of useful materials, devices, systems and methods

07 Report and technical writing, editing, information retrieval

08 Clinical diagnosis, psychotherapy

09 Design of equipment, processes, models

10 Quality control, testing, evaluation, or inspection

11 Operations—production, maintenance, construction, installation, exploration

12 Distribution—sales, traffic, purchasing, customer and public relations

13 Statistical work—survey work, forecasting, statistical analysis

14 Consulting

15 Computer applications

16 Other activities (SPECIFY): _____

_____

13 During a typical week in your principal job (as reported in question 9), what percent of working time do you devote to the following activities?

(ENTRIES SHOULD TOTAL 100.0%)

_____% Primary work activity

_____% Secondary work activity

_____% Other activities

100.0% TOTAL

14. From the DEGREE AND EMPLOYMENT LIST on the INSERT, select and enter the number and title of the specialty most closely related to your principal employment (as reported in question 9) during the week of February 4, 1990.

(PLEASE WRITE IN YOUR SPECIALTY IF IT IS NOT ON THE LIST)

Number: [ ][ ][ ]

Title: _____

_____

_____

15 For your principal job (as reported in question 9), what is the basic annual salary you **currently** earn?

(Do **not** include bonuses, overtime, summer teaching or other payments for secondary jobs)

$ _____.00 per year

☐ Not currently employed at that job.

16 If academically employed in your principal job, is your salary for:

☐ 9-10 months, OR ☐ 11-12 months?

☐ Not Academically employed.

17 How many years of professional work experience, including teaching, do you have?

_____ Year(s) OR ☐ None

18 Using the DEGREE AND EMPLOYMENT SPECIALTY LIST on the INSERT, complete the following statement:

"Based on my total education and experience, I regard myself professionally as a(an)...

_____."

CODE ☐☐☐

19. During the week of February 4, 1990, was any of your work at your principal job supported by U.S. Government funds?

1. ☐ Yes → *(GO TO QUESTION 20)*
2. ☐ No → *(SKIP TO QUESTION 21)*
3. ☐ Don't know → *(SKIP TO QUESTION 21)*

20. Which of the following agencies or departments were supporting your work?

(MARK AS MANY AS APPLY)

1. ☐ AID--Agency for International Development
2. ☐ Department of Agriculture
3. ☐ Department of Commerce
4. ☐ Department of Defense
5. ☐ Department of Energy
6. ☐ Department of Education (NIE, OE, NCES)
7. ☐ Department of Health and Human Services (DHHS)
8. ☐ Department of Housing and Urban Development
9. ☐ Department of the Interior
10. ☐ Department of Justice
11. ☐ Department of Labor
12. ☐ Department of Transportation
13. ☐ EPA—Environmental Protection Agency
14. ☐ NASA—National Aeronautics and Space Administration
15. ☐ NSF—National Science Foundation
16. ☐ Nuclear Regulatory Commission
17. ☐ Other, SPECIFY:

_____

_____

_____

18 ☐ Don't know source agency

21 The following list contains selected areas of national interest. Indicate the **one** area to which you devoted(d) the **most** professional time during a typical week at the job reported in question 9

1 ☐ Energy and fuel (GO TO QUESTION 22)
2 ☐ Health
3 ☐ Environment
4 ☐ Education
5 ☐ National defense
6 ☐ Agriculture
7 ☐ Mineral resources
8 ☐ Community development and service
9 ☐ Housing (planning, design, construction)
10 ☐ Transportation
11 ☐ Communications
12 ☐ Technological development
13 ☐ Space
14 ☐ Business/Commerce
15 ☐ Other, PLEASE SPECIFY:

_____

→ *(SKIP TO QUESTION 26)*

22. What is your best estimate of the percent of your professional time that you devote(d) to **energy and fuel** during a typical week?

1 ☐ 100 percent
2 ☐ 75 to 99 percent
3 ☐ 50 to 74 percent
4 ☐ 25 to 49 percent
5 ☐ 24 percent or less

23 From the list below, indicate the **one** energy source that involves(d) the **largest** proportion of your energy-related work during a typical week.

1. ☐ Coal and coal products
2. ☐ Petroleum (including oil shale and tar sands) or natural gas
3 ☐ Fission
4 ☐ Fusion
5. ☐ Hydroenergy
6. ☐ Direct solar (including space and water heating, thermal, electric)
7 ☐ Indirect solar (winds, tides, biomass, etc.)
8. ☐ Geothermal
9. ☐ Other, SPECIFY: _____

_____

24 From the list of energy-related activities below, indicate the items that best describe the activities in which you were engaged during a typical week.

(MARK AS MANY AS APPLY)

1 ☐ Exploration
2 ☐ Extraction (gas, oil, mining)
3 ☐ Manufacture of energy-related components or products
4. ☐ Fuel processing (including refining and enriching)
5 ☐ Electric power generation
6 ☐ Transportation, transmission, distribution of fuel or energy
7 ☐ Energy storage
8 ☐ Energy utilization, management
9. ☐ Fuel reprocessing or disposal
10. ☐ Energy conservation
11. ☐ Environmental impact (health, economic, etc.)
12 ☐ Education, training
13. ☐ Other, SPECIFY: _____

_____

25. From the list in question 24, enter the number of the activity that best describes the one in which you spend(t) most of your energy-related time.

(ENTER THE APPROPRIATE CODE NUMBER, 01-13, FROM QUESTION 24)

(CODE)

PART IV. DEMOGRAPHIC CHARACTERISTICS

26 In what month and year were you born?

_____ (MONTH) _____ (YEAR)

26a Where was your place of birth?

_____
(STATE, OR FOREIGN COUNTRY, IF NOT USA)

27 Are you:

1. ☐ Male 2. ☐ Female

28 Are you:

1 ☐ U.S. citizen → *(SKIP TO QUESTION 29)*

2 ☐ U.S. naturalized

3. ☐ Non-U.S. immigrant (Permanent Resident)

4 ☐ Non-U.S. citizen, nonimmigrant (Temporary Resident)

28a If non-U.S. citizen, of which country are you a citizen?

_____
(COUNTRY)

29. Are you:

1. ☐ American Indian or Alaskan Native
2. ☐ Asian or Pacific Islander
3. ☐ Black
4. ☐ White
5. ☐ Other, PLEASE SPECIFY:

_____
_____
_____
_____
_____
_____

29a. Are you of Spanish/Hispanic origin or descent?

1 ☐ Yes → 2. ☐ Mexican-American
3 ☐ Puerto Rican
4 ☐ Other Hispanic

5. ☐ No

30 As of February 4, 1990, were you:

1. ☐ Married 2 ☐ Widowed
3. ☐ Separated 4 ☐ Divorced
5. ☐ Never married

31 As of February 4, 1990, did you have any children living with you?

1 ☐ Yes → 2. ☐ Under 6 years of age
3 ☐ 6-17 years of age

4. ☐ No

32. Are you physically disabled?

1. ☐ Yes *(GO TO QUESTION 33)*
2 ☐ No *(SKIP TO QUESTION 34)*

33 If yes, what is the nature of your disability(ies)?

(MARK AS MANY AS APPLY)

1. ☐ No useful sight
2. ☐ No useful hearing
3. ☐ No use of arms or legs
4. ☐ Other, SPECIFY:

_____

PART V. OTHER INFORMATION

34 So that we can contact you in the event it is necessary to clarify some of the information you provide, please give us your first name and the telephone number at which you can be reached.

_____
(FIRST NAME)

_____ _____
(AREA CODE) (NUMBER)

If there is an alternate number at which you can be reached, enter it also.

_____ _____
(AREA CODE) (NUMBER)

35 Date completed:

_____ _____ _____
(MONTH) (DAY) (YEAR)

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE. PLEASE RETURN THE COMPLETED FORM IN THE ENCLOSED POSTAGE-PAID ENVELOPE TO:

INSTITUTE FOR SURVEY RESEARCH
TEMPLE UNIVERSITY--083-46
1601 NORTH BROAD STREET
PHILADELPHIA, PA 19122

DEGREE AND EMPLOYMENT SPECIALTY LIST

Agriculture

804 Agriculture, business
013 Agronomy
014 Animal, dairy, poultry sciences
015 Farm and range management
016 Fish, game, and wildlife management
017 Food sciences
018 Forestry and related sciences
019 Horticulture
020 Natural resources management
021 Soil science
090 Agricultural sciences, other*

Biological Sciences

211 Anatomy, histology
213 Biochemistry
714 Biometrics and biostatistics
214 Biophysics
215 Botany
221 Cell and molecular biology
216 Entomology
226 Embryology
217 Genetics
218 Immunology
219 Marine biology
220 Microbiology, bacteriology
227 Neurosciences
222 Nutrition
228 Parasitology
223 Pathology, human, animal, plant
224 Physiology, human, animal, plant
229 Radiology
230 Toxicology
225 Zoology
290 Biological sciences, other*

Education

413 Biological sciences education
414 Engineering education
417 Mathematics education
421 Physical sciences education
425 Social science education
490 Education, other*

Engineering

511 Aerospace, aeronautical, astronautical
512 Agricultural
513 Architectural
514 Bioengineering and biomedical engineering
515 Chemical, including petroleum refining
516 Civil, construction, and transportation
729 Computer
517 Electrical, electronic, and communication
529 Engineering science, mechanics, physics
519 Environmental and sanitary
520 Geological
521 Industrial
530 Materials
522 Mechanical
523 Metallurgical
524 Mining and mineral
525 Naval architecture and marine
526 Nuclear
531 Ocean
527 Petroleum
528 Textile
751 Operations research/management sciences
590 Engineering, other*

Mathematical Sciences

711 Actuarial science
712 Applied mathematics
750 Mathematics
751 Operations research/management sciences
713 Statistics
714 Biometrics and biostatistics
780 Mathematics, other*

Computer and Information Sciences

723 Software systems
724 Hardware systems
725 Intelligent systems
726 Information sciences
727 Systems analysis
728 Computer sciences, other*

Physical Sciences

720 Astronomy
721 Atmospheric sciences and meteorology
213 Biochemistry
722 Chemistry
741 Earth sciences and geology
733 Metallurgy
742 Oceanography
731 Physics
790 Physical sciences, other*

Social Sciences

811 Anthropology
812 Criminology
813 Economics (except agricultural)
814 Geography
823 Economics, agricultural
118 Linguistics
817 Political science and government
818 Psychology (except clinical)
821 Sociology
822 Urban studies
890 Social sciences, other*

Health Sciences

611 Clinical psychology
612 Dentistry
614 Hospital and health care administration
615 Medicine or premedicine
616 Nursing
617 Pharmacology
618 Pharmacy
690 Health area, other*

Arts, Humanities and Other Specialties

910 Area and ethnic studies
911 Architecture and environmental design
110 Arts and letters, general
310 Business and commerce
115 English and journalism
114 Fine and applied arts
116 Foreign language and literature, all fields
815 History
912 Home economics, all fields
913 Law and prelaw
914 Library science
915 Military science, including merchant marine deck officer
816 Philosophy
819 Religion and theology
820 Social work
999 Other specialities*

*Identify specific field in space provided in the questionnaire.

EMPLOYER CLASSIFICATION LIST

CODE

MANUFACTURING

401 Primary metals products
402 Fabricated metals products
403 Computers and computing equipment
404 Nonelectrical machinery (including engines and turbines, construction machinery, metal working and industrial machinery; and excluding computing and computing equipment)

Electrical Equipment

405 Household appliances (excluding radios and televisions)
406 Radios and televisions
407 Other electrical equipment (including electric motors, transmission equipment, and generators)*

Transportation Equipment

408 Aircraft, aircraft engine and parts
409 Motor vehicles and equipment
410 Guided missiles and space vehicles and parts
411 Other transportation equipment (including railroad and parts)*

412 Ordnance (including arms manufacture and ammunition)
413 Professional and scientific instruments
414 Chemicals and allied products
415 Petroleum and coal products, including petroleum refining
416 Other manufacturing*

* Identify specific industry in space provided in the questionnaire.

CODE

NON-MANUFACTURING

417 Construction

Mining and Petroleum Extraction

418 Coal mining
419 Petroleum and gas extraction
420 Other mining*

Transportation, Communications, and Utilities

421 Transportation
422 Communications
423 Utilities and sanitary services

Wholesale and Retail Trade

424 Wholesale trade
425 Retail trade

426 Finance, Insurance, and Real Estate

Services

427 Computer and data processing services
428 Engineering, architectural, and surveying services
429 Other services*

430 **Other***

STIS

The Science & Technology Information System at the National Science Foundation

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- Award abstracts (1989—now)

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Getting Started With Documents Via E-Mail

Send a message to **stisserv@nsf.gov** (Internet) or **stisserv@NSF** (BITNET). The *text* of the message should be as follows (the Subject line is ignored):

Request: stis
Topic: index

You will receive a list of all the documents on STIS and instructions for retrieving them. Please note that all requests for electronic documents should be sent to **stisserv**, as shown above. Requests for *printed* publications should be sent to *pubs@nsf.gov* (Internet) or *pubs@NSF* (BITNET), and include the document name, number, and your postal address.

Getting Started with Anonymous FTP

FTP to *stis.nsf.gov*. If you cannot connect, try *128.150.195.40*. Enter *anonymous* for the username, and your E-mail address for the password.

Retrieve the file *ftpindex*. This contains a list of the files available on STIS and additional instructions.

Getting Started with the On-Line System

If you are on the Internet: *telnet stis.nsf.gov*. If you cannot connect, try *telnet 128.150.195.40*. At the login prompt, enter *public*.

If you are dialing in with a modem: Choose 1200, 2400, or 9600 baud, 7-E-1. Dial 202-357-0359 or 202-357-0360. When connected, press Enter. At the login prompt, enter *public*.

Getting Started with Direct E-Mail

Send an E-mail message to **stisserv@nsf.gov** (Internet) or **stisserv@NSF** (BITNET). The Subject field will be ignored. Put the following in the message text:

Request: stis
Topic: stisdirm

You will receive instructions for this service.

For More Information

For additional assistance contact:

E-mail: *stis-request@nsf.gov* (Internet)
stis-req@NSF (BITNET)
Phone: 202-357-7555 (voice mail)
FAX: 202-357-7663
TDD: 202-357-7492

NSF 91-10 Revised 10/4/91

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